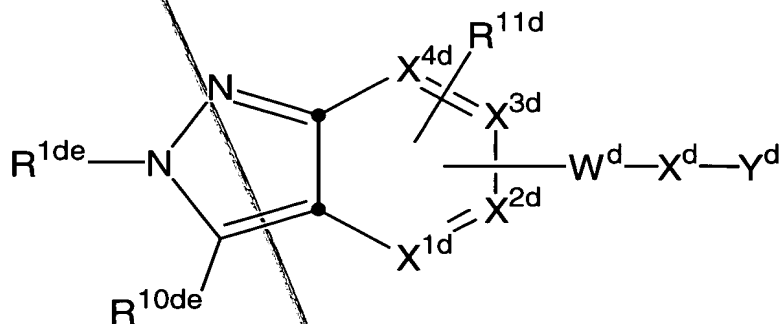


(Ia)

5



(Ib)

including stereoisomeric forms thereof, or mixtures of  
 10 stereoisomeric forms thereof, or pharmaceutically  
 acceptable salt or prodrug forms thereof wherein:

$X^{1d}$  is N, CH, C-  $W^d$ -  $X^d$ -  $Y^d$ , or C- $L_n$ ;

$X^{2d}$  is N, CH, or C-  $W^d$ -  $X^d$ -  $Y^d$ ;

15  $X^{3d}$  is N,  $CR^{11d}$ , or C-  $W^d$ -  $X^d$ -  $Y^d$ ;

$X^{4d}$  is N or  $CR^{11d}$ ;

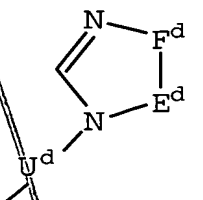
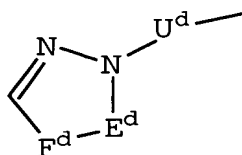
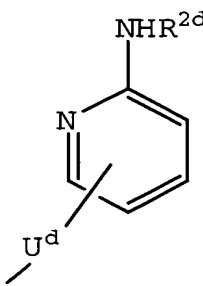
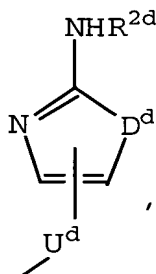
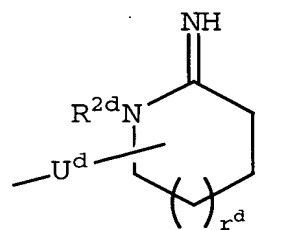
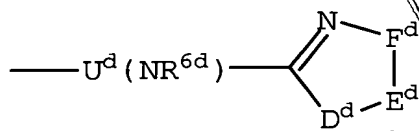
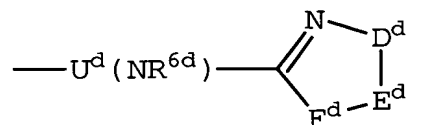
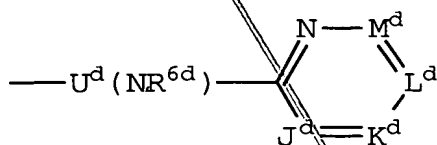
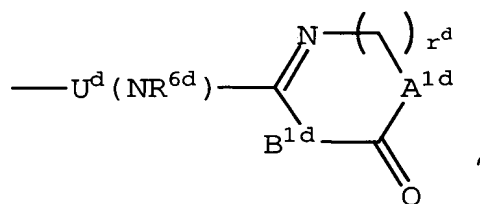
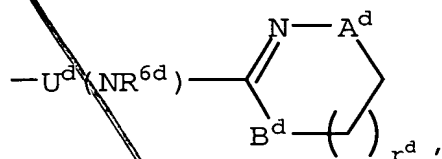
provided that when  $R^{1d}$  is  $R^{1de}$  then one of  $X^{1d}$  and  $X^{2d}$  is C-  $W^d$ -  
 $X^d$ -  $Y^d$ , and when  $R^{10d}$  is  $R^{1de}$  then  $X^{3d}$  is C-  $W^d$ -  $X^d$ -  $Y^d$ ;

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$R^{1d}$  is selected from:  $R^{1de}$ ,  $C_1$ - $C_6$  alkyl substituted with 0-1  
 $R^{15d}$  or 0-1  $R^{21d}$ ,  $C_3$ - $C_6$  alkenyl substituted with 0-1  $R^{15d}$

*B'*  
or 0-1 R<sup>21d</sup>, C<sub>3</sub>-C<sub>7</sub> cycloalkyl substituted with 0-1 R<sup>15d</sup> or  
0-1 R<sup>21d</sup>, C<sub>4</sub>-C<sub>11</sub> cycloalkylalkyl substituted with 0-1 R<sup>15d</sup>  
or 0-1 R<sup>21d</sup>, aryl substituted with 0-1 R<sup>15d</sup> or 0-2 R<sup>11d</sup> or  
0-1 R<sup>21d</sup>, and aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)- substituted with 0-1 R<sup>15d</sup>  
5 or 0-2 R<sup>11d</sup> or 0-1 R<sup>21d</sup>;

~~R<sup>1</sup>de~~ is selected from:



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A<sup>d</sup> and B<sup>d</sup> are independently -CH<sub>2</sub>-, -O-, -N(R<sup>2d</sup>)-, or -C(=O)-;

A<sup>1d</sup> and B<sup>1d</sup> are independently -CH<sub>2</sub>- or -N(R<sup>3d</sup>)-;

D<sup>d</sup> is -N(R<sup>2d</sup>)-, -O-, -S-, -C(=O)- or -SO<sub>2</sub>-;

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E<sup>d</sup>-F<sup>d</sup> is -C(R<sup>4d</sup>)=C(R<sup>5d</sup>)-, -N=C(R<sup>4d</sup>)-, -C(R<sup>4d</sup>)=N-, or  
-C(R<sup>4d</sup>)<sub>2</sub>C(R<sup>5d</sup>)<sub>2</sub>-;

J<sup>d</sup>, K<sup>d</sup>, L<sup>d</sup> and M<sup>d</sup> are independently selected from

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-C(R<sup>4d</sup>)-, -C(R<sup>5d</sup>)- and -N-, provided that at least one of  
J<sup>d</sup>, K<sup>d</sup>, L<sup>d</sup> and M<sup>d</sup> is not -N-;

R<sup>2d</sup> is selected from: H, C<sub>1</sub>-C<sub>6</sub> alkyl, (C<sub>1</sub>-C<sub>6</sub> alkyl)carbonyl,

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(C<sub>1</sub>-C<sub>6</sub> alkoxy)carbonyl; (C<sub>1</sub>-C<sub>6</sub> alkyl)aminocarbonyl, C<sub>3</sub>-C<sub>6</sub>  
alkenyl, C<sub>3</sub>-C<sub>7</sub> cycloalkyl, C<sub>4</sub>-C<sub>11</sub> cycloalkylalkyl, aryl,  
heteroaryl(C<sub>1</sub>-C<sub>6</sub> alkyl)carbonyl, heteroarylcabonyl,  
aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-, (C<sub>1</sub>-C<sub>6</sub> alkyl)carbonyl-, arylcarbonyl,  
C<sub>1</sub>-C<sub>6</sub> alkylsulfonyl, arylsulfonyl, aryl(C<sub>1</sub>-C<sub>6</sub>

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alkyl)sulfonyl, heteroarylsulfonyl, heteroaryl(C<sub>1</sub>-C<sub>6</sub>  
alkyl)sulfonyl, aryloxycarbonyl, and aryl(C<sub>1</sub>-C<sub>6</sub>  
alkoxy)carbonyl, wherein said aryl groups are substituted  
with 0-2 substituents selected from the group: C<sub>1</sub>-C<sub>4</sub>  
alkyl, C<sub>1</sub>-C<sub>4</sub> alkoxy, halo, CF<sub>3</sub>, and nitro;

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R<sup>3d</sup> is selected from: H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>7</sub> cycloalkyl, C<sub>4</sub>-C<sub>11</sub>  
cycloalkylalkyl, aryl, aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-, and  
heteroaryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-;

R<sup>4d</sup> and R<sup>5d</sup> are independently selected from: H, C<sub>1</sub>-C<sub>4</sub> alkoxy,

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NR<sup>2d</sup>R<sup>3d</sup>, halogen, NO<sub>2</sub>, CN, CF<sub>3</sub>, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>6</sub> alkenyl,  
C<sub>3</sub>-C<sub>7</sub> cycloalkyl, C<sub>4</sub>-C<sub>11</sub> cycloalkylalkyl, aryl, aryl(C<sub>1</sub>-C<sub>6</sub>

alkyl)-, (C<sub>1</sub>-C<sub>6</sub> alkyl)carbonyl, (C<sub>1</sub>-C<sub>6</sub> alkoxy)carbonyl,  
and arylcarbonyl, or

alternatively, when substituents on adjacent atoms, R<sup>4d</sup> and R<sup>5d</sup>  
5 can be taken together with the carbon atoms to which they  
are attached to form a 5-7 membered carbocyclic or 5-7  
membered heterocyclic aromatic or non-aromatic ring  
system, said carbocyclic or heterocyclic ring being  
optionally substituted with 0-2 groups selected from: C<sub>1</sub>-  
10 C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> alkoxy, halo, cyano, amino, CF<sub>3</sub>, and NO<sub>2</sub>;

U<sup>d</sup> is selected from:

- (CH<sub>2</sub>)<sub>n</sub><sup>d</sup>-,  
- (CH<sub>2</sub>)<sub>n</sub><sup>d</sup>(CR<sup>7d</sup>=CR<sup>8d</sup>)(CH<sub>2</sub>)<sub>m</sub><sup>d</sup>-,  
15 - (CH<sub>2</sub>)<sub>n</sub><sup>d</sup>(C≡C)(CH<sub>2</sub>)<sub>m</sub><sup>d</sup>-,  
- (CH<sub>2</sub>)<sub>t</sub><sup>d</sup>Q(CH<sub>2</sub>)<sub>m</sub><sup>d</sup>-,  
- (CH<sub>2</sub>)<sub>n</sub><sup>d</sup>O(CH<sub>2</sub>)<sub>m</sub><sup>d</sup>-,  
- (CH<sub>2</sub>)<sub>n</sub><sup>d</sup>N(R<sup>6d</sup>)(CH<sub>2</sub>)<sub>m</sub><sup>d</sup>-,  
- (CH<sub>2</sub>)<sub>n</sub><sup>d</sup>C(=O)(CH<sub>2</sub>)<sub>m</sub><sup>d</sup>-,  
20 - (CH<sub>2</sub>)<sub>n</sub><sup>d</sup>(C=O)N(R<sup>6d</sup>)(CH<sub>2</sub>)<sub>m</sub><sup>d</sup>-,  
- (CH<sub>2</sub>)<sub>n</sub><sup>d</sup>N(R<sup>6d</sup>)(C=O)(CH<sub>2</sub>)<sub>m</sub><sup>d</sup>-, and  
- (CH<sub>2</sub>)<sub>n</sub><sup>d</sup>S(O)<sub>p</sub><sup>d</sup>(CH<sub>2</sub>)<sub>m</sub><sup>d</sup>-;

wherein one or more of the methylene groups in U<sup>d</sup> is  
optionally substituted with R<sup>7d</sup>;

25 Q<sup>d</sup> is selected from 1,2-cycloalkylene, 1,2-phenylene, 1,3-  
phenylene, 1,4-phenylene, 2,3-pyridinylenes, 3,4-  
pyridinylenes, 2,4-pyridinylenes, and 3,4-pyridazinylenes;

30 R<sup>6d</sup> is selected from: H, C<sub>1</sub>-C<sub>4</sub> alkyl, and benzyl;

R<sup>7d</sup> and R<sup>8d</sup> are independently selected from: H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>7</sub> cycloalkyl, C<sub>4</sub>-C<sub>11</sub> cycloalkylalkyl, aryl, aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-, and heteroaryl(C<sub>0</sub>-C<sub>6</sub> alkyl)-;

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R<sup>10d</sup> is selected from: H, R<sup>1de</sup>, C<sub>1</sub>-C<sub>4</sub> alkoxy substituted with 0-1 R<sup>21d</sup>, N(R<sup>6d</sup>)<sub>2</sub>, halogen, NO<sub>2</sub>, CN, CF<sub>3</sub>, CO<sub>2</sub>R<sup>17d</sup>, C(=O)R<sup>17d</sup>, CONR<sup>17d</sup>R<sup>20d</sup>, -SO<sub>2</sub>R<sup>17d</sup>, -SO<sub>2</sub>NR<sup>17d</sup>R<sup>20d</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl substituted with 0-1 R<sup>15d</sup> or 0-1 R<sup>21d</sup>, C<sub>3</sub>-C<sub>6</sub> alkenyl substituted with 0-1 R<sup>15d</sup> or 0-1 R<sup>21d</sup>, C<sub>3</sub>-C<sub>7</sub> cycloalkyl substituted with 0-1 R<sup>15d</sup> or 0-1 R<sup>21d</sup>, C<sub>4</sub>-C<sub>11</sub> cycloalkylalkyl substituted with 0-1 R<sup>15d</sup> or 0-1 R<sup>21d</sup>, aryl substituted with 0-1 R<sup>15d</sup> or 0-2 R<sup>11d</sup> or 0-1 R<sup>21d</sup>, and aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)- substituted with 0-1 R<sup>15d</sup> or 0-2 R<sup>11d</sup> or 0-1 R<sup>21d</sup>;

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R<sup>10de</sup> is selected from: H, C<sub>1</sub>-C<sub>4</sub> alkoxy substituted with 0-1 R<sup>21d</sup>, N(R<sup>6d</sup>)<sub>2</sub>, halogen, NO<sub>2</sub>, CN, CF<sub>3</sub>, CO<sub>2</sub>R<sup>17d</sup>, C(=O)R<sup>17d</sup>, CONR<sup>17d</sup>R<sup>20d</sup>, -SO<sub>2</sub>R<sup>17d</sup>, -SO<sub>2</sub>NR<sup>17d</sup>R<sup>20d</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl substituted with 0-1 R<sup>15d</sup> or 0-1 R<sup>21d</sup>, C<sub>3</sub>-C<sub>6</sub> alkenyl substituted with 0-1 R<sup>15d</sup> or 0-1 R<sup>21d</sup>, C<sub>3</sub>-C<sub>7</sub> cycloalkyl substituted with 0-1 R<sup>15d</sup> or 0-1 R<sup>21d</sup>, C<sub>4</sub>-C<sub>11</sub> cycloalkylalkyl substituted with 0-1 R<sup>15d</sup> or 0-1 R<sup>21d</sup>, aryl substituted with 0-1 R<sup>15d</sup> or 0-2 R<sup>11d</sup> or 0-1 R<sup>21d</sup>, and aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)- substituted with 0-1 R<sup>15d</sup> or 0-2 R<sup>11d</sup> or 0-1 R<sup>21d</sup>;

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R<sup>11d</sup> is selected from H, halogen, CF<sub>3</sub>, CN, NO<sub>2</sub>, hydroxy, NR<sup>2d</sup>R<sup>3d</sup>, C<sub>1</sub>-C<sub>4</sub> alkyl substituted with 0-1 R<sup>21d</sup>, C<sub>1</sub>-C<sub>4</sub> alkoxy substituted with 0-1 R<sup>21d</sup>, aryl substituted with 0-1 R<sup>21d</sup>, aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)- substituted with 0-1 R<sup>21d</sup>,

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(C<sub>1</sub>-C<sub>4</sub> alkoxy)carbonyl substituted with 0-1 R<sup>21d</sup>, (C<sub>1</sub>-C<sub>4</sub> alkyl)carbonyl substituted with 0-1 R<sup>21d</sup>, C<sub>1</sub>-C<sub>4</sub> alkylsulfonyl substituted with 0-1 R<sup>21d</sup>, and C<sub>1</sub>-C<sub>4</sub> alkylaminosulfonyl substituted with 0-1 R<sup>21d</sup>;

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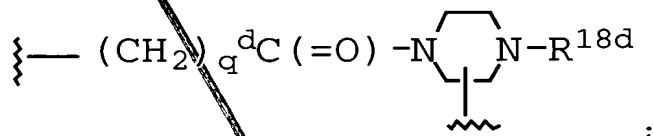
W<sup>d</sup> is selected from:

-(C(R<sup>12d</sup>)<sub>2</sub>)<sub>q</sub><sup>d</sup>C(=O)N(R<sup>13d</sup>)-, and

-C(=O)-N(R<sup>13d</sup>)-(C(R<sup>12d</sup>)<sub>2</sub>)<sub>q</sub><sup>d</sup>-;

10 X<sup>d</sup> is -C(R<sup>12d</sup>)(R<sup>14d</sup>)-C(R<sup>12d</sup>)(R<sup>15d</sup>)-; or

alternatively, W<sup>d</sup> and X<sup>d</sup> can be taken together to be



15 R<sup>12d</sup> is selected from H, halogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl, C<sub>2</sub>-C<sub>6</sub> alkynyl, C<sub>3</sub>-C<sub>7</sub> cycloalkyl, C<sub>4</sub>-C<sub>10</sub> cycloalkylalkyl, (C<sub>1</sub>-C<sub>4</sub> alkyl)carbonyl, aryl, and aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-;

R<sup>13d</sup> is selected from H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>7</sub> cycloalkylmethyl, and aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-;

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R<sup>14d</sup> is selected from:

H, C<sub>1</sub>-C<sub>6</sub> alkylthio(C<sub>1</sub>-C<sub>6</sub> alkyl)-, aryl(C<sub>1</sub>-C<sub>10</sub> alkylthioalkyl)-, aryl(C<sub>1</sub>-C<sub>10</sub> alkoxyalkyl)-, C<sub>1</sub>-C<sub>10</sub> alkyl, C<sub>1</sub>-C<sub>10</sub> alkoxyalkyl, C<sub>1</sub>-C<sub>6</sub> hydroxyalkyl, C<sub>2</sub>-C<sub>10</sub> alkenyl, C<sub>2</sub>-C<sub>10</sub> alkynyl, C<sub>3</sub>-C<sub>10</sub> cycloalkyl, C<sub>3</sub>-C<sub>10</sub> cycloalkylalkyl, aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-, heteroaryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-, aryl, heteroaryl, CO<sub>2</sub>R<sup>17d</sup>, C(=O)R<sup>17d</sup>, and CONR<sup>17d</sup>R<sup>20d</sup>, provided that any of the above alkyl, cycloalkyl, aryl or

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heteroaryl groups may be unsubstituted or substituted independently with 0-1  $R^{16d}$  or 0-2  $R^{11d}$ ;

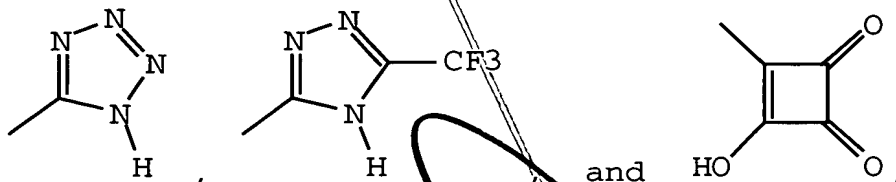
$R^{15d}$  is selected from:

- 5 H,  $R^{16d}$ ,  $C_1$ - $C_{10}$  alkyl,  $C_1$ - $C_{10}$  alkoxyalkyl,  $C_1$ - $C_{10}$  alkylaminoalkyl,  $C_1$ - $C_{10}$  dialkylaminoalkyl, ( $C_1$ - $C_{10}$  alkyl)carbonyl, aryl( $C_1$ - $C_6$  alkyl)carbonyl,  $C_1$ - $C_{10}$  alkenyl,  $C_1$ - $C_{10}$  alkynyl,  $C_3$ - $C_{10}$  cycloalkyl,  $C_3$ - $C_{10}$  cycloalkylalkyl, aryl( $C_1$ - $C_6$  alkyl)-, heteroaryl( $C_1$ - $C_6$  alkyl)-, aryl,
- 10 heteroaryl,  $CO_2R^{17d}$ ,  $C(=O)R^{17d}$ ,  $CONR^{17d}R^{20d}$ ,  $SO_2R^{17d}$ , and  $SO_2NR^{17d}R^{20d}$ , provided that any of the above alkyl, cycloalkyl, aryl or heteroaryl groups may be unsubstituted or substituted independently with 0-2  $R^{11d}$ ;

15  $Y^d$  is selected from:

- $COR^{19d}$ ,  $-SO_3H$ ,  $-PO_3H$ , tetrazolyl,  $-CONHNHSO_2CF_3$ ,  $-CONHSO_2R^{17d}$ ,  $-CONHSO_2NHR^{17d}$ ,  $-NHCOCF_3$ ,  $-NHCONHSO_2R^{17d}$ ,  $-NHSO_2R^{17d}$ ,  $-OPO_3H_2$ ,  $-OSO_3H$ ,  $-PO_3H_2$ ,  $-SO_3H$ ,  $-SO_2NHCOR^{17d}$ ,  $-SO_2NHCO_2R^{17d}$ ,

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$R^{16d}$  is selected from:

- $N(R^{20d})-C(=O)-O-R^{17d}$ ,
- 25 - $N(R^{20d})-C(=O)-R^{17d}$ ,
- $N(R^{20d})-C(=O)-NH-R^{17d}$ ,
- $N(R^{20d})SO_2-R^{17d}$ , and
- $N(R^{20d})SO_2-NR^{20d}R^{17d}$ ;



$R^{17d}$  is selected from:

$C_1$ - $C_{10}$  alkyl optionally substituted with a bond to  $L_n$ ,  $C_3$ -  
 $C_{11}$  cycloalkyl optionally substituted with a bond to  $L_n$ ,  
 aryl( $C_1$ - $C_6$  alkyl)- optionally substituted with a bond to  
 5  $L_n$ , ( $C_1$ - $C_6$  alkyl)aryl optionally substituted with a bond  
 to  $L_n$ , heteroaryl( $C_1$ - $C_6$  alkyl)- optionally substituted  
 with a bond to  $L_n$ , ( $C_1$ - $C_6$  alkyl)heteroaryl optionally  
 substituted with a bond to  $L_n$ , biaryl( $C_1$ - $C_6$  alkyl)-  
 optionally substituted with a bond to  $L_n$ , heteroaryl  
 10 optionally substituted with a bond to  $L_n$ , aryl optionally  
 substituted with a bond to  $L_n$ , biaryl optionally  
 substituted with a bond to  $L_n$ , and a bond to  $L_n$ , wherein  
 said aryl, biaryl or heteroaryl groups are also  
 optionally substituted with 0-3 substituents selected  
 15 from the group consisting of:  $C_1$ - $C_4$  alkyl,  $C_1$ - $C_4$  alkoxy,  
 aryl, heteroaryl, halo, cyano, amino,  $CF_3$ , and  $NO_2$ ;

$R^{18d}$  is selected from:

-H,  
 20 -C(=O)-O- $R^{17d}$ ,  
 -C(=O)- $R^{17d}$ ,  
 -C(=O)-NH- $R^{17d}$ ,  
 -SO<sub>2</sub>- $R^{17d}$ , and  
 -SO<sub>2</sub>-NR<sup>20d</sup> $R^{17d}$ ;

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$R^{19d}$  is selected from: hydroxy,  $C_1$ - $C_{10}$  alkyloxy,  
 $C_3$ - $C_{11}$  cycloalkyloxy, aryloxy, aryl( $C_1$ - $C_6$  alkoxy)-,  $C_3$ - $C_{10}$   
 alkylcarbonyloxyalkyloxy,  $C_3$ - $C_{10}$   
 alkoxy carbonyloxyalkyloxy,  $C_2$ - $C_{10}$  alkoxy carbonylalkyloxy,  
 30  $C_5$ - $C_{10}$  cycloalkylcarbonyloxyalkyloxy,  
 $C_5$ - $C_{10}$  cycloalkoxy carbonyloxyalkyloxy,  
 $C_5$ - $C_{10}$  cycloalkoxy carbonylalkyloxy,

C<sub>7</sub>-C<sub>11</sub> aryloxy carbonylalkyloxy,  
 C<sub>8</sub>-C<sub>12</sub> aryloxy carbonyloxyalkyloxy,  
 C<sub>8</sub>-C<sub>12</sub> aryl carbonyloxyalkyloxy,  
 C<sub>5</sub>-C<sub>10</sub> alkoxyalkyl carbonyloxyalkyloxy, C<sub>5</sub>-C<sub>10</sub> (5-alkyl-  
 1,3-dioxo-cyclopenten-2-one-yl)methyloxy, C<sub>10</sub>-C<sub>14</sub> (5-aryl-  
 1,3-dioxo-cyclopenten-2-one-yl)methyloxy, and  
 (R<sup>11d</sup>) (R<sup>12d</sup>)N-(C<sub>1</sub>-C<sub>10</sub> alkoxy)-;

R<sup>20d</sup> is selected from: H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>7</sub> cycloalkyl, C<sub>4</sub>-C<sub>11</sub>  
 cycloalkylalkyl, aryl, aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-, and  
 heteroaryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-;

R<sup>21d</sup> is selected from: COOH and NR<sup>6d</sup><sub>2</sub>;

m<sup>d</sup> is 0-4;

15 n<sup>d</sup> is 0-4;

t<sup>d</sup> is 0-4;

p<sup>d</sup> is 0-2;

q<sup>d</sup> is 0-2; and

r<sup>d</sup> is 0-2;

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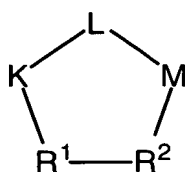
with the following provisos:

(1) t<sup>d</sup>, n<sup>d</sup>, m<sup>d</sup> and q<sup>d</sup> are chosen such that the number of atoms  
 connecting R<sup>1d</sup> and Y<sup>d</sup> is in the range of 10-14; and

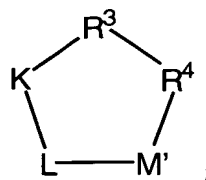
(2) n<sup>d</sup> and m<sup>d</sup> are chosen such that the value of n<sup>d</sup> plus m<sup>d</sup> is  
 25 greater than one unless U<sup>d</sup> is

$$-(\text{CH}_2)_t \text{Q}^{\text{d}} (\text{CH}_2)_m^-;$$

or Q is a peptide selected from the group:



and



R<sup>1</sup> is L-valine, D-valine or L-lysine optionally substituted on the ε amino group with a bond to L<sub>n</sub>;

5

R<sup>2</sup> is L-phenylalanine, D-phenylalanine, D-1-naphthylalanine, 2-aminothiazole-4-acetic acid or tyrosine, the tyrosine optionally substituted on the hydroxy group with a bond to L<sub>n</sub>;

10

R<sup>3</sup> is D-valine;

R<sup>4</sup> is D-tyrosine substituted on the hydroxy group with a bond to L<sub>n</sub>;

15

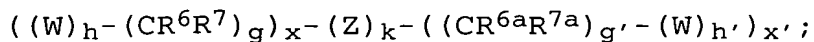
provided that one of R<sup>1</sup> and R<sup>2</sup> in each Q is substituted with a bond to L<sub>n</sub>, and further provided that when R<sup>2</sup> is 2-aminothiazole-4-acetic acid, K is N-methylarginine;

20 provided that at least one Q is a compound of Formula (Ia) or (Ib);

d is selected from 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;

25 d' is 1-100;

L<sub>n</sub> is a linking group having the formula:



W is independently selected at each occurrence from the group:

O, S, NH, NHC(=O), C(=O)NH, NR<sup>8</sup>C(=O), C(=O)N R<sup>8</sup>, C(=O),  
C(=O)O, OC(=O), NHC(=S)NH, NHC(=O)NH, SO<sub>2</sub>, SO<sub>2</sub>NH,  
(OCH<sub>2</sub>CH<sub>2</sub>)<sub>s</sub>, (CH<sub>2</sub>CH<sub>2</sub>O)<sub>s'</sub>, (OCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>)<sub>s''</sub>, (CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>O)<sub>t</sub>, and  
5 (aa)<sub>t'</sub>;

aa is independently at each occurrence an amino acid;

10 Z is selected from the group: aryl substituted with 0-3 R<sup>10</sup>,  
C<sub>3-10</sub> cycloalkyl substituted with 0-3 R<sup>10</sup>, and a 5-10  
membered heterocyclic ring system containing 1-4  
heteroatoms independently selected from N, S, and O and  
substituted with 0-3 R<sup>10</sup>;

15 R<sup>6</sup>, R<sup>6a</sup>, R<sup>7</sup>, R<sup>7a</sup>, and R<sup>8</sup> are independently selected at each  
occurrence from the group: H, =O, COOH, SO<sub>3</sub>H, PO<sub>3</sub>H, C<sub>1-5</sub>  
alkyl substituted with 0-3 R<sup>10</sup>, aryl substituted with 0-3  
R<sup>10</sup>, benzyl substituted with 0-3 R<sup>10</sup>, and C<sub>1-5</sub> alkoxy  
substituted with 0-3 R<sup>10</sup>, NHC(=O)R<sup>11</sup>, C(=O)NHR<sup>11</sup>,  
20 NHC(=O)NHR<sup>11</sup>, NHR<sup>11</sup>, R<sup>11</sup>, and a bond to C<sub>H</sub>;

R<sup>10</sup> is independently selected at each occurrence from the  
group: a bond to C<sub>H</sub>, COOR<sup>11</sup>, C(=O)NHR<sup>11</sup>, NHC(=O)R<sup>11</sup>, OH,  
NHR<sup>11</sup>, SO<sub>3</sub>H, PO<sub>3</sub>H, -OPO<sub>3</sub>H<sub>2</sub>, -OSO<sub>3</sub>H, aryl substituted with  
25 0-3 R<sup>11</sup>, C<sub>1-5</sub> alkyl substituted with 0-1 R<sup>12</sup>, C<sub>1-5</sub> alkoxy  
substituted with 0-1 R<sup>12</sup>, and a 5-10 membered  
heterocyclic ring system containing 1-4 heteroatoms  
independently selected from N, S, and O and substituted  
with 0-3 R<sup>11</sup>;

30

R<sup>11</sup> is independently selected at each occurrence from the  
group: H, alkyl substituted with 0-1 R<sup>12</sup>, aryl

substituted with 0-1  $R^{12}$ , a 5-10 membered heterocyclic  
 ring system containing 1-4 heteroatoms independently  
 selected from N, S, and O and substituted with 0-1  $R^{12}$ ,  
 $C_3-10$  cycloalkyl substituted with 0-1  $R^{12}$ , polyalkylene  
 glycol substituted with 0-1  $R^{12}$ , carbohydrate substituted  
 with 0-1  $R^{12}$ , cyclodextrin substituted with 0-1  $R^{12}$ , amino  
 acid substituted with 0-1  $R^{12}$ , polycarboxyalkyl  
 substituted with 0-1  $R^{12}$ , polyazaalkyl substituted with  
 0-1  $R^{12}$ , and peptide substituted with 0-1  $R^{12}$ , wherein the  
 peptide is comprised of 2-10 amino acids, 3,6-O-disulfo-  
 B-D-galactopyranosyl, bis(phosphonomethyl)glycine, and a  
 bond to  $Ch$ ;

$R^{12}$  is a bond to  $Ch$ ;

$k$  is selected from 0, 1, and 2;

$h$  is selected from 0, 1, and 2;

$h'$  is selected from 0, 1, and 2;

$g$  is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;

$g'$  is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;

$s$  is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;

$s'$  is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;

$s''$  is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;

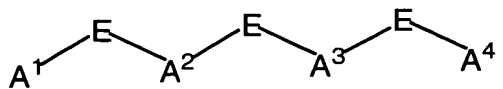
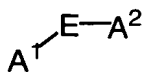
$t$  is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;

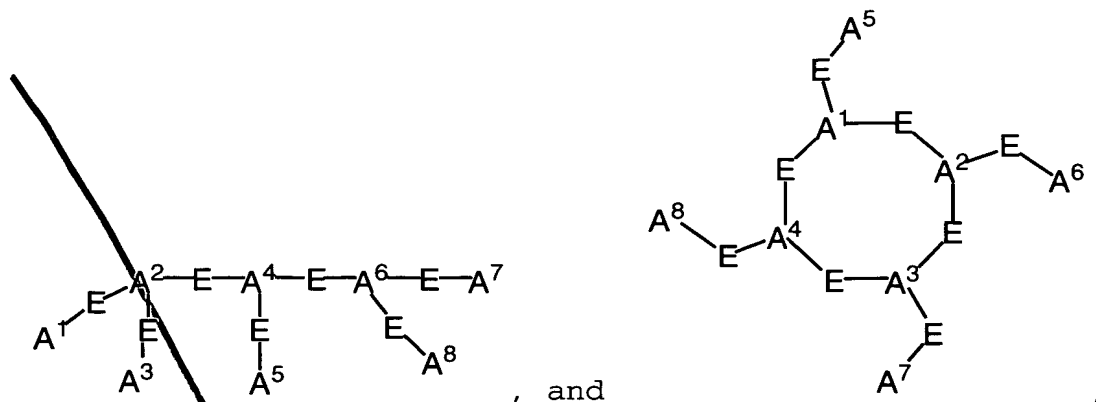
$t'$  is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;

$x$  is selected from 0, 1, 2, 3, 4, and 5;

$x'$  is selected from 0, 1, 2, 3, 4, and 5;

$Ch$  is a metal bonding unit having a formula selected from the  
 group:





$A^1, A^2, A^3, A^4, A^5, A^6, A^7,$  and  $A^8$  are independently selected at each occurrence from the group:  $NR^{13}, NR^{13}R^{14}, S, SH, S(Pg), O, OH, PR^{13}, PR^{13}R^{14}, P(O)R^{15}R^{16}$ , and a bond to  $L_n$ ;

$E$  is a bond,  $CH$ , or a spacer group independently selected at each occurrence from the group:  $C_1$ - $C_{10}$  alkyl substituted with 0-3  $R^{17}$ , aryl substituted with 0-3  $R^{17}$ ,  $C_3$ - $C_{10}$  cycloalkyl substituted with 0-3  $R^{17}$ , heterocyclo- $C_1$ - $C_{10}$  alkyl substituted with 0-3  $R^{17}$ , wherein the heterocyclo group is a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from  $N, S,$  and  $O$ ,  $C_6$ - $C_{10}$  aryl- $C_1$ - $C_{10}$  alkyl substituted with 0-3  $R^{17}$ ,  $C_1$ - $C_{10}$  alkyl- $C_6$ - $C_{10}$  aryl- substituted with 0-3  $R^{17}$ , and a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from  $N, S,$  and  $O$  and substituted with 0-3  $R^{17}$ ;

$R^{13}$  and  $R^{14}$  are each independently selected from the group: a bond to  $L_n$ , hydrogen,  $C_1$ - $C_{10}$  alkyl substituted with 0-3  $R^{17}$ , aryl substituted with 0-3  $R^{17}$ ,  $C_1$ - $C_{10}$  cycloalkyl substituted with 0-3  $R^{17}$ , heterocyclo- $C_1$ - $C_{10}$  alkyl substituted with 0-3  $R^{17}$ , wherein the heterocyclo group

is a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O, C<sub>6-10</sub> aryl-C<sub>1-10</sub> alkyl substituted with 0-3 R<sup>17</sup>, C<sub>1-10</sub> alkyl-C<sub>6-10</sub> aryl- substituted with 0-3 R<sup>17</sup>, a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O and substituted with 0-3 R<sup>17</sup>, and an electron, provided that when one of R<sup>13</sup> or R<sup>14</sup> is an electron, then the other is also an electron;

alternatively, R<sup>13</sup> and R<sup>14</sup> combine to form =C(R<sup>20</sup>)(R<sup>21</sup>);

R<sup>15</sup> and R<sup>16</sup> are each independently selected from the group: a bond to L<sub>n</sub>, -OH, C<sub>1-10</sub> alkyl substituted with 0-3 R<sup>17</sup>, C<sub>1-10</sub> alkyl substituted with 0-3 R<sup>17</sup>, aryl substituted with 0-3 R<sup>17</sup>, C<sub>3-10</sub> cycloalkyl substituted with 0-3 R<sup>17</sup>, heterocyclo-C<sub>1-10</sub> alkyl substituted with 0-3 R<sup>17</sup>, wherein the heterocyclo group is a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O, C<sub>6-10</sub> aryl-C<sub>1-10</sub> alkyl substituted with 0-3 R<sup>17</sup>, C<sub>1-10</sub> alkyl-C<sub>6-10</sub> aryl- substituted with 0-3 R<sup>17</sup>, and a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O and substituted with 0-3 R<sup>17</sup>;

R<sup>17</sup> is independently selected at each occurrence from the group: a bond to L<sub>n</sub>, =O, F, Cl, Br, I, -CF<sub>3</sub>, -CN, -CO<sub>2</sub>R<sup>18</sup>, -C(=O)R<sup>18</sup>, -C(=O)N(R<sup>18</sup>)<sub>2</sub>, -CHO, -CH<sub>2</sub>OR<sup>18</sup>, -OC(=O)R<sup>18</sup>, -OC(=O)OR<sup>18a</sup>, -OR<sup>18</sup>, -OC(=O)N(R<sup>18</sup>)<sub>2</sub>, -NR<sup>19</sup>C(=O)R<sup>18</sup>, -NR<sup>19</sup>C(=O)OR<sup>18a</sup>, -NR<sup>19</sup>C(=O)N(R<sup>18</sup>)<sub>2</sub>,

$\text{-NR}^{19}\text{SO}_2\text{N(R}^{18})_2$ ,  $\text{-NR}^{19}\text{SO}_2\text{R}^{18a}$ ,  $\text{-SO}_3\text{H}$ ,  $\text{-SO}_2\text{R}^{18a}$ ,  $\text{-SR}^{18}$ ,  
 $\text{-S(=O)R}^{18a}$ ,  $\text{-SO}_2\text{N(R}^{18})_2$ ,  $\text{-N(R}^{18})_2$ ,  $\text{-NHC(=S)NHR}^{18}$ ,  $\text{=NOR}^{18}$ ,  
 $\text{NO}_2$ ,  $\text{-C(=O)NHR}^{18}$ ,  $\text{-C(=O)NHN(R}^{18})\text{R}^{18a}$ ,  $\text{-OCH}_2\text{CO}_2\text{H}$ ,  
 2-(1-morpholino)ethoxy,  $\text{C}_1\text{-C}_5$  alkyl,  $\text{C}_2\text{-C}_4$  alkenyl,  $\text{C}_3\text{-C}_6$   
 5 cycloalkyl,  $\text{C}_3\text{-C}_6$  cycloalkylmethyl,  $\text{C}_2\text{-C}_6$  alkoxyalkyl,  
 aryl substituted with 0-2  $\text{R}^{18}$ , and a 5-10 membered  
 heterocyclic ring system containing 1-4 heteroatoms  
 independently selected from N, S, and O;

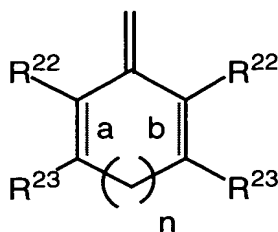
10  $\text{R}^{18}$ ,  $\text{R}^{18a}$ , and  $\text{R}^{19}$  are independently selected at each  
 occurrence from the group: a bond to  $\text{L}_n$ , H,  $\text{C}_1\text{-C}_6$  alkyl,  
 phenyl, benzyl,  $\text{C}_1\text{-C}_6$  alkoxy, halide, nitro, cyano, and  
 trifluoromethyl;

15  $\text{Pg}$  is a thiol protecting group;

$\text{R}^{20}$  and  $\text{R}^{21}$  are independently selected from the group: H,  
 $\text{C}_1\text{-C}_{10}$  alkyl,  $\text{-CN}$ ,  $\text{-CO}_2\text{R}^{25}$ ,  $\text{-C(=O)R}^{25}$ ,  $\text{-C(=O)N(R}^{25})_2$ ,  
 $\text{C}_2\text{-C}_{10}$  1-alkene substituted with 0-3  $\text{R}^{23}$ ,  $\text{C}_2\text{-C}_{10}$  1-alkyne  
 20 substituted with 0-3  $\text{R}^{23}$ , aryl substituted with 0-3  $\text{R}^{23}$ ,  
 unsaturated 5-10 membered heterocyclic ring system  
 containing 1-4 heteroatoms independently selected from N,  
 S, and O and substituted with 0-3  $\text{R}^{23}$ , and unsaturated  
 $\text{C}_3\text{-C}_{10}$  carbocycle substituted with 0-3  $\text{R}^{23}$ ;

25 alternatively,  $\text{R}^{20}$  and  $\text{R}^{21}$ , taken together with the divalent  
 carbon radical to which they are attached form:





$R^{22}$  and  $R^{23}$  are independently selected from the group: H,  $R^{24}$ , C<sub>1</sub>-C<sub>10</sub> alkyl substituted with 0-3  $R^{24}$ , C<sub>2</sub>-C<sub>10</sub> alkenyl substituted with 0-3  $R^{24}$ , C<sub>2</sub>-C<sub>10</sub> alkynyl substituted with 0-3  $R^{24}$ , aryl substituted with 0-3  $R^{24}$ , a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O and substituted with 0-3  $R^{24}$ , and C<sub>3</sub>-10 carbocycle substituted with 0-3  $R^{24}$ ;

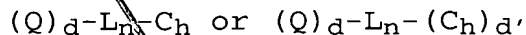
alternatively,  $R^{22}$ ,  $R^{23}$  taken together form a fused aromatic or a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O;

**a** and **b** indicate the positions of optional double bonds and **n** is 0 or 1;

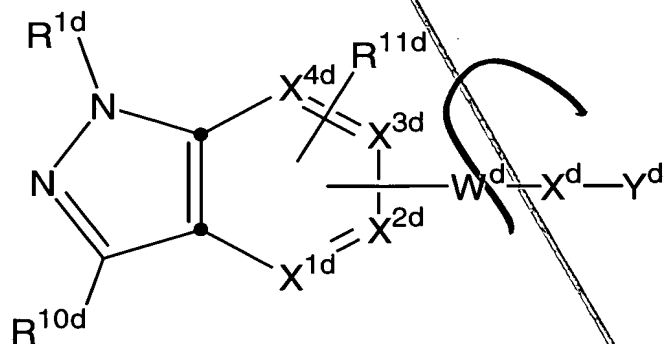
$R^{24}$  is independently selected at each occurrence from the group: =O, F, Cl, Br, I, -CF<sub>3</sub>, -CN, -CO<sub>2</sub>R<sup>25</sup>, -C(=O)R<sup>25</sup>, -C(=O)N(R<sup>25</sup>)<sub>2</sub>, -N(R<sup>25</sup>)<sub>3</sub><sup>+</sup>, -CH<sub>2</sub>OR<sup>25</sup>, -OC(=O)R<sup>25</sup>, -OC(=O)OR<sup>25a</sup>, -OR<sup>25</sup>, -OC(=O)N(R<sup>25</sup>)<sub>2</sub>, -NR<sup>26</sup>C(=O)R<sup>25</sup>, -NR<sup>26</sup>C(=O)OR<sup>25a</sup>, -NR<sup>26</sup>C(=O)N(R<sup>25</sup>)<sub>2</sub>, -NR<sup>26</sup>SO<sub>2</sub>N(R<sup>25</sup>)<sub>2</sub>, -NR<sup>26</sup>SO<sub>2</sub>R<sup>25a</sup>, -SO<sub>3</sub>H, -SO<sub>2</sub>R<sup>25a</sup>, -SR<sup>25</sup>, -S(=O)R<sup>25a</sup>, -SO<sub>2</sub>N(R<sup>25</sup>)<sub>2</sub>, -N(R<sup>25</sup>)<sub>2</sub>, =NOR<sup>25</sup>, -C(=O)NHOR<sup>25</sup>, -OCH<sub>2</sub>CO<sub>2</sub>H, and 2-(1-morpholino)ethoxy; and,

$R^{25}$ ,  $R^{25a}$ , and  $R^{26}$  are each independently selected at each occurrence from the group: hydrogen and C<sub>1</sub>-C<sub>6</sub> alkyl.

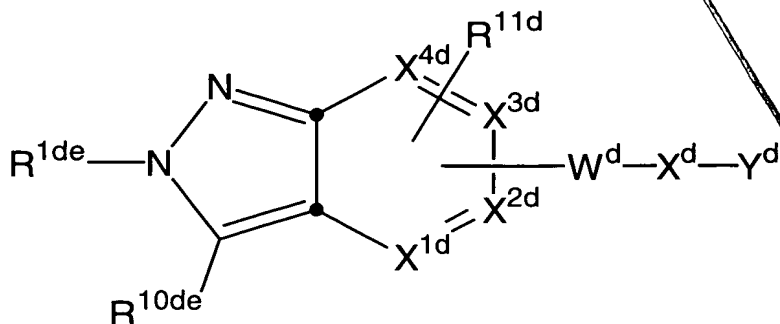
- 5 59. (Amended) A kit according to claim 58 wherein said kit comprises a plurality of separate containers, wherein at least one of said containers contains one or more agents selected from the group consisting of a chemotherapeutic agent and a radiosensitizer agent, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier, and  
 10 another of said containers contains a compound of formula:



- 15 wherein, Q is independently a compound of Formula (Ia) or (Ib):



(Ia)



(Ib)

including stereoisomeric forms thereof, or mixtures of  
stereoisomeric forms thereof, or pharmaceutically  
5 acceptable salt or prodrug forms thereof wherein:

$X^{1d}$  is N, CH, C-  $W^d$ -  $X^d$ -  $Y^d$ , or C- $L_n$ ;

$X^{2d}$  is N, CH, or C-  $W^d$ -  $X^d$ -  $Y^d$ ;

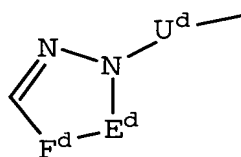
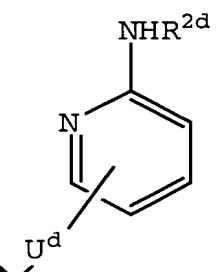
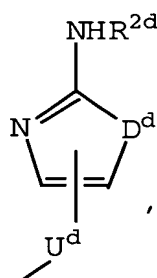
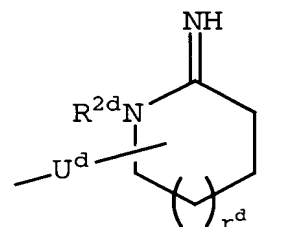
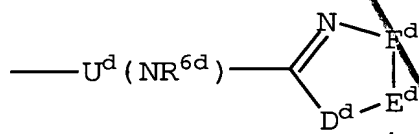
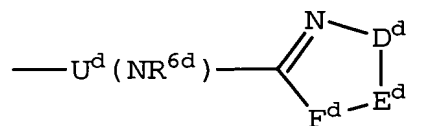
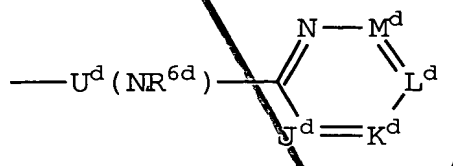
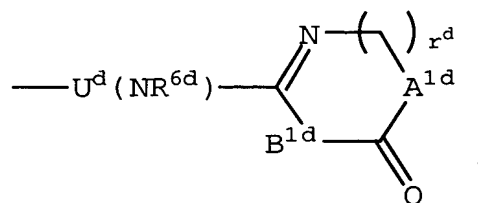
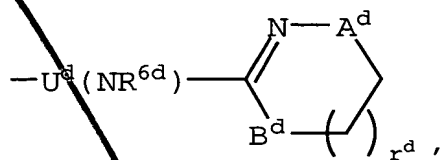
$X^{3d}$  is N,  $CR^{11d}$ , or C-  $W^d$ -  $X^d$ -  $Y^d$ ;

10  $X^{4d}$  is N or  $CR^{11d}$ ;

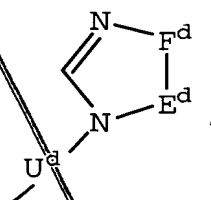
B<sup>1</sup>  
provided that when  $R^{1d}$  is  $R^{1de}$  then one of  $X^{1d}$  and  $X^{2d}$  is C-  $W^d$ -  
 $X^d$ -  $Y^d$ , and when  $R^{10d}$  is  $R^{1de}$  then  $X^{3d}$  is C-  $W^d$ -  $X^d$ -  $Y^d$ ;

15  $R^{1d}$  is selected from:  $R^{1de}$ ,  $C_1$ - $C_6$  alkyl substituted with 0-1  
 $R^{15d}$  or 0-1  $R^{21d}$ ,  $C_3$ - $C_6$  alkenyl substituted with 0-1  $R^{15d}$   
or 0-1  $R^{21d}$ ,  $C_3$ - $C_7$  cycloalkyl substituted with 0-1  $R^{15d}$  or  
0-1  $R^{21d}$ ,  $C_4$ - $C_{11}$  cycloalkylalkyl substituted with 0-1  $R^{15d}$   
or 0-1  $R^{21d}$ , aryl substituted with 0-1  $R^{15d}$  or 0-2  $R^{11d}$  or  
20 0-1  $R^{21d}$ , and aryl( $C_1$ - $C_6$  alkyl)- substituted with 0-1  $R^{15d}$   
or 0-2  $R^{11d}$  or 0-1  $R^{21d}$ ;

$R^{1d}$  is selected from:



or



5

$A^d$  and  $B^d$  are independently  $-\text{CH}_2-$ ,  $-\text{O}-$ ,  $-\text{N}(\text{R}^{2d})-$ , or  $-\text{C}(=\text{O})-$ ;

A<sup>1d</sup> and B<sup>1d</sup> are independently -CH<sub>2</sub>- or -N(R<sup>3d</sup>)-;

D<sup>d</sup> is -N(R<sup>2d</sup>)-, -O-, -S-, -C(=O)- or -SO<sub>2</sub>-;

5

E<sup>d</sup>-F<sup>d</sup> is -C(R<sup>4d</sup>)=C(R<sup>5d</sup>)-, -N=C(R<sup>4d</sup>)-, -C(R<sup>4d</sup>)=N-, or  
-C(R<sup>4d</sup>)<sub>2</sub>C(R<sup>5d</sup>)<sub>2</sub>-;

J<sup>d</sup>, K<sup>d</sup>, L<sup>d</sup> and M<sup>d</sup> are independently selected from

10

-C(R<sup>4d</sup>)-, -C(R<sup>5d</sup>)- and -N-, provided that at least one of  
J<sup>d</sup>, K<sup>d</sup>, L<sup>d</sup> and M<sup>d</sup> is not -N-;

B<sup>1</sup>

R<sup>2d</sup> is selected from: H, C<sub>1</sub>-C<sub>6</sub> alkyl, (C<sub>1</sub>-C<sub>6</sub> alkyl)carbonyl,  
(C<sub>1</sub>-C<sub>6</sub> alkoxy)carbonyl; (C<sub>1</sub>-C<sub>6</sub> alkyl)aminocarbonyl, C<sub>3</sub>-C<sub>6</sub>  
15 alkenyl, C<sub>3</sub>-C<sub>7</sub> cycloalkyl, C<sub>4</sub>-C<sub>11</sub> cycloalkylalkyl, aryl,  
heteroaryl(C<sub>1</sub>-C<sub>6</sub> alkyl)carbonyl, heteroarylcabonyl,  
aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-, (C<sub>1</sub>-C<sub>6</sub> alkyl)carbonyl-, arylcarbonyl,  
C<sub>1</sub>-C<sub>6</sub> alkylsulfonyl, arylsulfonyl, aryl(C<sub>1</sub>-C<sub>6</sub>  
alkyl)sulfonyl, heteroarylsulfonyl, heteroaryl(C<sub>1</sub>-C<sub>6</sub>  
20 alkyl)sulfonyl, aryloxycarbonyl, and aryl(C<sub>1</sub>-C<sub>6</sub>  
alkoxy)carbonyl, wherein said aryl groups are substituted  
with 0-2 substituents selected from the group: C<sub>1</sub>-C<sub>4</sub>  
alkyl, C<sub>1</sub>-C<sub>4</sub> alkoxy, halo, CF<sub>3</sub>, and nitro;

25

R<sup>3d</sup> is selected from: H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>7</sub> cycloalkyl, C<sub>4</sub>-C<sub>11</sub>  
cycloalkylalkyl, aryl, aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-, and  
heteroaryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-;

R<sup>4d</sup> and R<sup>5d</sup> are independently selected from: H, C<sub>1</sub>-C<sub>4</sub> alkoxy,

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NR<sup>2d</sup>R<sup>3d</sup>, halogen, NO<sub>2</sub>, CN, CF<sub>3</sub>, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>6</sub> alkenyl,  
C<sub>3</sub>-C<sub>7</sub> cycloalkyl, C<sub>4</sub>-C<sub>11</sub> cycloalkylalkyl, aryl, aryl(C<sub>1</sub>-C<sub>6</sub>

alkyl)-, (C<sub>1</sub>-C<sub>6</sub> alkyl)carbonyl, (C<sub>1</sub>-C<sub>6</sub> alkoxy)carbonyl,  
and arylcarbonyl, or

alternatively, when substituents on adjacent atoms, R<sup>4d</sup> and R<sup>5d</sup>  
5 can be taken together with the carbon atoms to which they  
are attached to form a 5-7 membered carbocyclic or 5-7  
membered heterocyclic aromatic or non-aromatic ring  
system, said carbocyclic or heterocyclic ring being  
optionally substituted with 0-2 groups selected from: C<sub>1</sub>-  
10 C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> alkoxy, halo, cyano, amino, CF<sub>3</sub>, and NO<sub>2</sub>;

U<sup>d</sup> is selected from:

- (CH<sub>2</sub>)<sub>n</sub><sup>d</sup>-,  
- (CH<sub>2</sub>)<sub>n</sub><sup>d</sup>(CR<sup>7d</sup>=CR<sup>8d</sup>)(CH<sub>2</sub>)<sub>m</sub><sup>d</sup>-,  
15 - (CH<sub>2</sub>)<sub>n</sub><sup>d</sup>(C≡C)(CH<sub>2</sub>)<sub>m</sub><sup>d</sup>-,  
- (CH<sub>2</sub>)<sub>t</sub><sup>d</sup>Q(CH<sub>2</sub>)<sub>m</sub><sup>d</sup>-,  
- (CH<sub>2</sub>)<sub>n</sub><sup>d</sup>O(CH<sub>2</sub>)<sub>m</sub><sup>d</sup>-,  
- (CH<sub>2</sub>)<sub>n</sub><sup>d</sup>N(R<sup>6d</sup>)(CH<sub>2</sub>)<sub>m</sub><sup>d</sup>-,  
- (CH<sub>2</sub>)<sub>n</sub><sup>d</sup>C(=O)(CH<sub>2</sub>)<sub>m</sub><sup>d</sup>-,  
20 - (CH<sub>2</sub>)<sub>n</sub><sup>d</sup>(C=O)N(R<sup>6d</sup>)(CH<sub>2</sub>)<sub>m</sub><sup>d</sup>-,  
- (CH<sub>2</sub>)<sub>n</sub><sup>d</sup>N(R<sup>6d</sup>)(C=O)(CH<sub>2</sub>)<sub>m</sub><sup>d</sup>-, and  
- (CH<sub>2</sub>)<sub>n</sub><sup>d</sup>S(O)<sub>p</sub><sup>d</sup>(CH<sub>2</sub>)<sub>m</sub><sup>d</sup>-;

wherein one or more of the methylene groups in U<sup>d</sup> is  
optionally substituted with R<sup>7d</sup>;

25 Q<sup>d</sup> is selected from 1,2-cycloalkylene, 1,2-phenylene, 1,3-  
phenylene, 1,4-phenylene, 2,3-pyridinylenes, 3,4-  
pyridinylenes, 2,4-pyridinylenes, and 3,4-pyridazinylenes;

30 R<sup>6d</sup> is selected from: H, C<sub>1</sub>-C<sub>4</sub> alkyl, and benzyl;

R<sup>7d</sup> and R<sup>8d</sup> are independently selected from: H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>7</sub> cycloalkyl, C<sub>4</sub>-C<sub>11</sub> cycloalkylalkyl, aryl, aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-, and heteroaryl(C<sub>0</sub>-C<sub>6</sub> alkyl)-;

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R<sup>10d</sup> is selected from: H, R<sup>1de</sup>, C<sub>1</sub>-C<sub>4</sub> alkoxy substituted with 0-1 R<sup>21d</sup>, N(R<sup>6d</sup>)<sub>2</sub>, halogen, NO<sub>2</sub>, CN, CF<sub>3</sub>, CO<sub>2</sub>R<sup>17d</sup>, C(=O)R<sup>17d</sup>, CONR<sup>17d</sup>R<sup>20d</sup>, -SO<sub>2</sub>R<sup>17d</sup>, -SO<sub>2</sub>NR<sup>17d</sup>R<sup>20d</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl substituted with 0-1 R<sup>15d</sup> or 0-1 R<sup>21d</sup>, C<sub>3</sub>-C<sub>6</sub> alkenyl substituted with 0-1 R<sup>15d</sup> or 0-1 R<sup>21d</sup>, C<sub>3</sub>-C<sub>7</sub> cycloalkyl substituted with 0-1 R<sup>15d</sup> or 0-1 R<sup>21d</sup>, C<sub>4</sub>-C<sub>11</sub> cycloalkylalkyl substituted with 0-1 R<sup>15d</sup> or 0-1 R<sup>21d</sup>, aryl substituted with 0-1 R<sup>15d</sup> or 0-2 R<sup>11d</sup> or 0-1 R<sup>21d</sup>, and aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)- substituted with 0-1 R<sup>15d</sup> or 0-2 R<sup>11d</sup> or 0-1 R<sup>21d</sup>;

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R<sup>10de</sup> is selected from: H, C<sub>1</sub>-C<sub>4</sub> alkoxy substituted with 0-1 R<sup>21d</sup>, N(R<sup>6d</sup>)<sub>2</sub>, halogen, NO<sub>2</sub>, CN, CF<sub>3</sub>, CO<sub>2</sub>R<sup>17d</sup>, C(=O)R<sup>17d</sup>, CONR<sup>17d</sup>R<sup>20d</sup>, -SO<sub>2</sub>R<sup>17d</sup>, -SO<sub>2</sub>NR<sup>17d</sup>R<sup>20d</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl substituted with 0-1 R<sup>15d</sup> or 0-1 R<sup>21d</sup>, C<sub>3</sub>-C<sub>6</sub> alkenyl substituted with 0-1 R<sup>15d</sup> or 0-1 R<sup>21d</sup>, C<sub>3</sub>-C<sub>7</sub> cycloalkyl substituted with 0-1 R<sup>15d</sup> or 0-1 R<sup>21d</sup>, C<sub>4</sub>-C<sub>11</sub> cycloalkylalkyl substituted with 0-1 R<sup>15d</sup> or 0-1 R<sup>21d</sup>, aryl substituted with 0-1 R<sup>15d</sup> or 0-2 R<sup>11d</sup> or 0-1 R<sup>21d</sup>, and aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)- substituted with 0-1 R<sup>15d</sup> or 0-2 R<sup>11d</sup> or 0-1 R<sup>21d</sup>;

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R<sup>11d</sup> is selected from H, halogen, CF<sub>3</sub>, CN, NO<sub>2</sub>, hydroxy, NR<sup>2d</sup>R<sup>3d</sup>, C<sub>1</sub>-C<sub>4</sub> alkyl substituted with 0-1 R<sup>21d</sup>, C<sub>1</sub>-C<sub>4</sub> alkoxy substituted with 0-1 R<sup>21d</sup>, aryl substituted with 0-1 R<sup>21d</sup>, aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)- substituted with 0-1 R<sup>21d</sup>,

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(C<sub>1</sub>-C<sub>4</sub> alkoxy)carbonyl substituted with 0-1 R<sup>21d</sup>, (C<sub>1</sub>-C<sub>4</sub> alkyl)carbonyl substituted with 0-1 R<sup>21d</sup>, C<sub>1</sub>-C<sub>4</sub> alkylsulfonyl substituted with 0-1 R<sup>21d</sup>, and C<sub>1</sub>-C<sub>4</sub> alkylaminosulfonyl substituted with 0-1 R<sup>21d</sup>;

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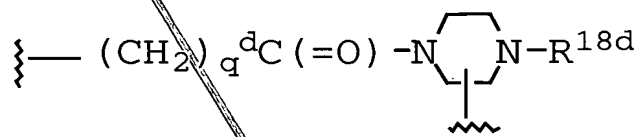
W<sup>d</sup> is selected from:

-(C(R<sup>12d</sup>)<sub>2</sub>)<sub>q</sub><sup>d</sup>C(=O)N(R<sup>13d</sup>)-, and

-C(=O)-N(R<sup>13d</sup>)-(C(R<sup>12d</sup>)<sub>2</sub>)<sub>q</sub><sup>d</sup>-;

10 X<sup>d</sup> is -C(R<sup>12d</sup>)(R<sup>14d</sup>)-C(R<sup>12d</sup>)(R<sup>15d</sup>)-; or

alternatively, W<sup>d</sup> and X<sup>d</sup> can be taken together to be



15 R<sup>12d</sup> is selected from H, halogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl, C<sub>2</sub>-C<sub>6</sub> alkynyl, C<sub>3</sub>-C<sub>7</sub> cycloalkyl, C<sub>4</sub>-C<sub>10</sub> cycloalkylalkyl, (C<sub>1</sub>-C<sub>4</sub> alkyl)carbonyl, aryl, and aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-;

R<sup>13d</sup> is selected from H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>7</sub> cycloalkylmethyl, and aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-;

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R<sup>14d</sup> is selected from:

H, C<sub>1</sub>-C<sub>6</sub> alkylthio(C<sub>1</sub>-C<sub>6</sub> alkyl)-, aryl(C<sub>1</sub>-C<sub>10</sub> alkylthioalkyl)-, aryl(C<sub>1</sub>-C<sub>10</sub> alkoxyalkyl)-, C<sub>1</sub>-C<sub>10</sub> alkyl, C<sub>1</sub>-C<sub>10</sub> alkoxyalkyl, C<sub>1</sub>-C<sub>6</sub> hydroxyalkyl, C<sub>2</sub>-C<sub>10</sub> alkenyl, C<sub>2</sub>-C<sub>10</sub> alkynyl, C<sub>3</sub>-C<sub>10</sub> cycloalkyl, C<sub>3</sub>-C<sub>10</sub> cycloalkylalkyl, aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-, heteroaryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-, aryl, heteroaryl, CO<sub>2</sub>R<sup>17d</sup>, C(=O)R<sup>17d</sup>, and CONR<sup>17d</sup>R<sup>20d</sup>, provided that any of the above alkyl, cycloalkyl, aryl or

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heteroaryl groups may be unsubstituted or substituted independently with 0-1  $R^{16d}$  or 0-2  $R^{11d}$ ;

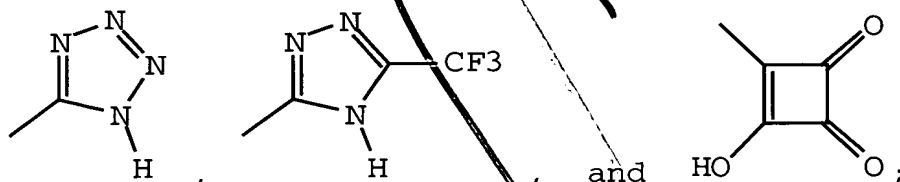
$R^{15d}$  is selected from:

- 5 H,  $R^{16d}$ ,  $C_1$ - $C_{10}$  alkyl,  $C_1$ - $C_{10}$  alkoxyalkyl,  $C_1$ - $C_{10}$  alkylaminoalkyl,  $C_1$ - $C_{10}$  dialkylaminoalkyl, ( $C_1$ - $C_{10}$  alkyl)carbonyl, aryl( $C_1$ - $C_6$  alkyl)carbonyl,  $C_1$ - $C_{10}$  alkenyl,  $C_1$ - $C_{10}$  alkynyl,  $C_3$ - $C_{10}$  cycloalkyl,  $C_3$ - $C_{10}$  cycloalkylalkyl, aryl( $C_1$ - $C_6$  alkyl)-, heteroaryl( $C_1$ - $C_6$  alkyl)-, aryl,
- 10 heteroaryl,  $CO_2R^{17d}$ ,  $C(=O)R^{17d}$ ,  $CONR^{17d}R^{20d}$ ,  $SO_2R^{17d}$ , and  $SO_2NR^{17d}R^{20d}$ , provided that any of the above alkyl, cycloalkyl, aryl or heteroaryl groups may be unsubstituted or substituted independently with 0-2  $R^{11d}$ ;

15  $Y^d$  is selected from:

$-COR^{19d}$ ,  $-SO_3H$ ,  $-PO_3H$ , tetrazolyl,  $-CONHNHSO_2CF_3$ ,  $-CONHSO_2R^{17d}$ ,  $-CONHSO_2NHR^{17d}$ ,  $-NHCOCF_3$ ,  $-NHCONHSO_2R^{17d}$ ,  $-NHSO_2R^{17d}$ ,  $-OPO_3H_2$ ,  $-OSO_3H$ ,  $-PO_3H_2$ ,  $-SO_3H$ ,  $-SO_2NHCOR^{17d}$ ,  $-SO_2NHCO_2R^{17d}$ ,

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$R^{16d}$  is selected from:

- $-N(R^{20d})-C(=O)-O-R^{17d}$ ,
- 25  $-N(R^{20d})-C(=O)-R^{17d}$ ,
- $-N(R^{20d})-C(=O)-NH-R^{17d}$ ,
- $-N(R^{20d})SO_2-R^{17d}$ , and
- $-N(R^{20d})SO_2-NR^{20d}R^{17d}$ ;

R<sup>17d</sup> is selected from:

C<sub>1</sub>-C<sub>10</sub> alkyl optionally substituted with a bond to L<sub>n</sub>, C<sub>3</sub>-  
 C<sub>11</sub> cycloalkyl optionally substituted with a bond to L<sub>n</sub>,  
 aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)- optionally substituted with a bond to  
 5 L<sub>n</sub>, (C<sub>1</sub>-C<sub>6</sub> alkyl)aryl optionally substituted with a bond  
 to L<sub>n</sub>, heteroaryl(C<sub>1</sub>-C<sub>6</sub> alkyl)- optionally substituted  
 with a bond to L<sub>n</sub>, (C<sub>1</sub>-C<sub>6</sub> alkyl)heteroaryl optionally  
 substituted with a bond to L<sub>n</sub>, biaryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-  
 optionally substituted with a bond to L<sub>n</sub>, heteroaryl  
 10 optionally substituted with a bond to L<sub>n</sub>, aryl optionally  
 substituted with a bond to L<sub>n</sub>, biaryl optionally  
 substituted with a bond to L<sub>n</sub>, and a bond to L<sub>n</sub>, wherein  
 said aryl, biaryl or heteroaryl groups are also  
 optionally substituted with 0-3 substituents selected  
 15 from the group consisting of: C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> alkoxy,  
 aryl, heteroaryl, halo, cyano, amino, CF<sub>3</sub>, and NO<sub>2</sub>;

R<sup>18d</sup> is selected from:

-H,  
 20 -C(=O)-O-R<sup>17d</sup>,  
 -C(=O)-R<sup>17d</sup>,  
 -C(=O)-NH-R<sup>17d</sup>,  
 -SO<sub>2</sub>-R<sup>17d</sup>, and  
 -SO<sub>2</sub>-NR<sup>20d</sup>R<sup>17d</sup>;

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R<sup>19d</sup> is selected from: hydroxy, C<sub>1</sub>-C<sub>10</sub> alkyloxy,  
 C<sub>3</sub>-C<sub>11</sub> cycloalkyloxy, aryloxy, aryl(C<sub>1</sub>-C<sub>6</sub> alkoxy)-, C<sub>3</sub>-C<sub>10</sub>  
 alkylcarbonyloxyalkyloxy, C<sub>3</sub>-C<sub>10</sub>  
 alkoxy carbonyloxyalkyloxy, C<sub>2</sub>-C<sub>10</sub> alkoxy carbonylalkyloxy,  
 30 C<sub>5</sub>-C<sub>10</sub> cycloalkylcarbonyloxyalkyloxy,  
 C<sub>5</sub>-C<sub>10</sub> cycloalkoxy carbonyloxyalkyloxy,  
 C<sub>5</sub>-C<sub>10</sub> cycloalkoxy carbonylalkyloxy,

C<sub>7</sub>-C<sub>11</sub> aryloxy-carbonylalkyloxy,  
 C<sub>8</sub>-C<sub>12</sub> aryloxy-carbonyloxyalkyloxy,  
 C<sub>8</sub>-C<sub>12</sub> aryl-carbonyloxyalkyloxy,  
 C<sub>5</sub>-C<sub>10</sub> alkoxyalkyl-carbonyloxyalkyloxy, C<sub>5</sub>-C<sub>10</sub> (5-alkyl-  
 5 1,3-dioxa-cyclopenten-2-one-yl)methyloxy, C<sub>10</sub>-C<sub>14</sub> (5-aryl-  
 1,3-dioxa-cyclopenten-2-one-yl)methyloxy, and  
 (R<sup>11d</sup>) (R<sup>12d</sup>)N-(C<sub>1</sub>-C<sub>10</sub> alkoxy)-;

R<sup>20d</sup> is selected from: H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>7</sub> cycloalkyl, C<sub>4</sub>-C<sub>11</sub>  
 10 cycloalkylalkyl, aryl, aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-, and  
 heteroaryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-;

R<sup>21d</sup> is selected from: COOH and NR<sup>6d</sup><sub>2</sub>;

m<sup>d</sup> is 0-4;

15 n<sup>d</sup> is 0-4;

t<sup>d</sup> is 0-4;

p<sup>d</sup> is 0-2;

q<sup>d</sup> is 0-2; and

r<sup>d</sup> is 0-2;

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with the following provisos:

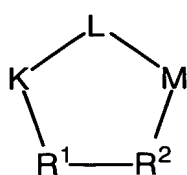
(1) t<sup>d</sup>, n<sup>d</sup>, m<sup>d</sup> and q<sup>d</sup> are chosen such that the number of atoms  
 connecting R<sup>1d</sup> and Y<sup>d</sup> is in the range of 10-14; and

(2) n<sup>d</sup> and m<sup>d</sup> are chosen such that the value of n<sup>d</sup> plus m<sup>d</sup> is

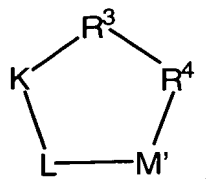
25 greater than one unless U<sup>d</sup> is

-(CH<sub>2</sub>)<sub>t</sub><sup>d</sup> Q<sup>d</sup> (CH<sub>2</sub>)<sub>m</sub><sup>d</sup> -;

or Q is a peptide selected from the group:



and



R<sup>1</sup> is L-valine, D-valine or L-lysine optionally substituted on the amino group with a bond to L<sub>n</sub>;

R<sup>2</sup> is L-phenylalanine, D-phenylalanine, D-1-naphthylalanine, 2-aminothiazole-4-acetic acid or tyrosine, the tyrosine optionally substituted on the hydroxy group with a bond to L<sub>n</sub>;

R<sup>3</sup> is D-valine;

R<sup>4</sup> is D-tyrosine substituted on the hydroxy group with a bond to L<sub>n</sub>;

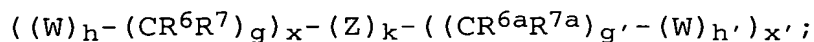
provided that one of R<sup>1</sup> and R<sup>2</sup> in each Q is substituted with a bond to L<sub>n</sub>, and further provided that when R<sup>2</sup> is 2-aminothiazole-4-acetic acid, K is N-methylarginine;

provided that at least one Q is a compound of Formula (Ia) or (Ib);

d is selected from 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;

d' is 1-100;

L<sub>n</sub> is a linking group having the formula:



W is independently selected at each occurrence from the group:

O, S, NH, NHC(=O), C(=O)NH, NR<sup>8</sup>C(=O), C(=O)NR<sup>8</sup>, C(=O),  
 C(=O)O, OC(=O), NHC(=S)NH, NHC(=O)NH, SO<sub>2</sub>, SO<sub>2</sub>NH,  
 (OCH<sub>2</sub>CH<sub>2</sub>)<sub>s</sub>, (CH<sub>2</sub>CH<sub>2</sub>O)<sub>s'</sub>, (OCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>)<sub>s''</sub>, (CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>O)<sub>t</sub>, and  
 5 (aa)<sub>t'</sub>;

aa is independently at each occurrence an amino acid;

10 Z is selected from the group: aryl substituted with 0-3 R<sup>10</sup>,  
 C<sub>3-10</sub> cycloalkyl substituted with 0-3 R<sup>10</sup>, and a 5-10  
 membered heterocyclic ring system containing 1-4  
 heteroatoms independently selected from N, S, and O and  
 substituted with 0-3 R<sup>10</sup>;

15 R<sup>6</sup>, R<sup>6a</sup>, R<sup>7</sup>, R<sup>7a</sup>, and R<sup>8</sup> are independently selected at each  
 occurrence from the group: H, =O, COOH, SO<sub>3</sub>H, PO<sub>3</sub>H, C<sub>1-5</sub>  
 alkyl substituted with 0-3 R<sup>10</sup>, aryl substituted with 0-3  
 R<sup>10</sup>, benzyl substituted with 0-3 R<sup>10</sup>, and C<sub>1-5</sub> alkoxy  
 substituted with 0-3 R<sup>10</sup>, NHC(=O)R<sup>11</sup>, C(=O)NHR<sup>11</sup>,  
 20 NHC(=O)NHR<sup>11</sup>, NHR<sup>11</sup>, R<sup>11</sup>, and a bond to C<sub>H</sub>;

R<sup>10</sup> is independently selected at each occurrence from the  
 group: a bond to C<sub>H</sub>, COOR<sup>11</sup>, C(=O)NHR<sup>11</sup>, NHC(=O)R<sup>11</sup>, OH,  
 NHR<sup>11</sup>, SO<sub>3</sub>H, PO<sub>3</sub>H, -OPO<sub>3</sub>H<sub>2</sub>, -OSO<sub>3</sub>H, aryl substituted with  
 25 0-3 R<sup>11</sup>, C<sub>1-5</sub> alkyl substituted with 0-1 R<sup>12</sup>, C<sub>1-5</sub> alkoxy  
 substituted with 0-1 R<sup>12</sup>, and a 5-10 membered  
 heterocyclic ring system containing 1-4 heteroatoms  
 independently selected from N, S, and O and substituted  
 with 0-3 R<sup>11</sup>;

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R<sup>11</sup> is independently selected at each occurrence from the  
 group: H, alkyl substituted with 0-1 R<sup>12</sup>, aryl

substituted with 0-1  $R^{12}$ , a 5-10 membered heterocyclic  
 ring system containing 1-4 heteroatoms independently  
 selected from N, S, and O and substituted with 0-1  $R^{12}$ ,  
 C<sub>3-10</sub> cycloalkyl substituted with 0-1  $R^{12}$ , polyalkylene  
 glycol substituted with 0-1  $R^{12}$ , carbohydrate substituted  
 with 0-1  $R^{12}$ , cyclodextrin substituted with 0-1  $R^{12}$ , amino  
 acid substituted with 0-1  $R^{12}$ , polycarboxyalkyl  
 substituted with 0-1  $R^{12}$ , polyazaalkyl substituted with  
 0-1  $R^{12}$ , and peptide substituted with 0-1  $R^{12}$ , wherein the  
 peptide is comprised of 2-10 amino acids, 3,6-O-disulfo-  
 B-D-galactopyranosyl, bis(phosphonomethyl)glycine, and a  
 bond to  $C_h$ ;

$R^{12}$  is a bond to  $C_h$ ;

15

k is selected from 0, 1, and 2;

h is selected from 0, 1, and 2;

h' is selected from 0, 1, and 2;

g is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;

20 

g' is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;

s is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;

s' is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;

s'' is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;

t is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;

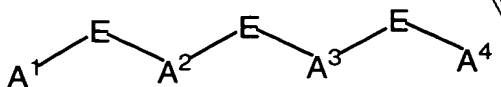
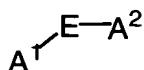
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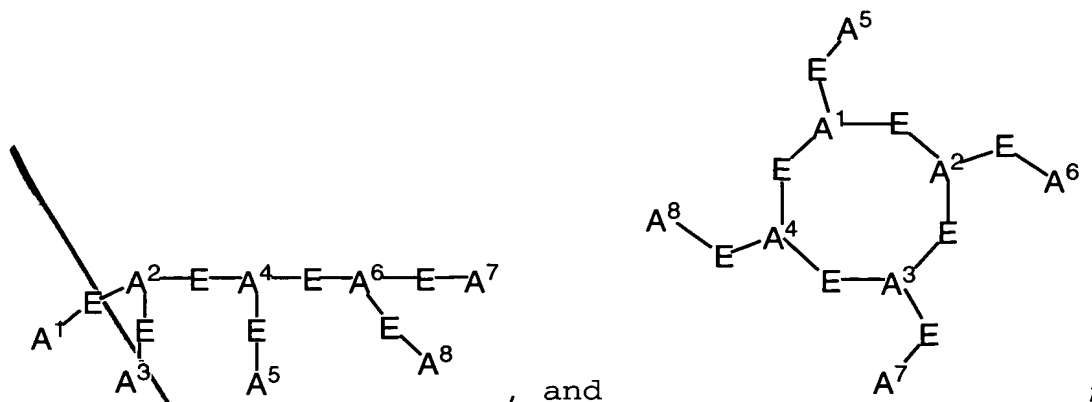
t' is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;

x is selected from 0, 1, 2, 3, 4, and 5;

x' is selected from 0, 1, 2, 3, 4, and 5;

30  $C_h$  is a metal bonding unit having a formula selected from the group:





$A^1, A^2, A^3, A^4, A^5, A^6, A^7,$  and  $A^8$  are independently selected at each occurrence from the group:  $NR^{13}, NR^{13}R^{14}, S, SH, S(Pg), O, OH, PR^{13}, PR^{13}R^{14}, P(O)R^{15}R^{16}$ , and a bond to  $L_n$ ;

$E$  is a bond,  $CH$ , or a spacer group independently selected at each occurrence from the group:  $C_1$ - $C_{10}$  alkyl substituted with 0-3  $R^{17}$ , aryl substituted with 0-3  $R^{17}$ ,  $C_{3-10}$  cycloalkyl substituted with 0-3  $R^{17}$ , heterocyclo- $C_{1-10}$  alkyl substituted with 0-3  $R^{17}$ , wherein the heterocyclo group is a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from  $N, S,$  and  $O$ ,  $C_{6-10}$  aryl- $C_{1-10}$  alkyl substituted with 0-3  $R^{17}$ ,  $C_{1-10}$  alkyl- $C_{6-10}$  aryl- substituted with 0-3  $R^{17}$ , and a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from  $N, S,$  and  $O$  and substituted with 0-3  $R^{17}$ ;

$R^{13}$  and  $R^{14}$  are each independently selected from the group: a bond to  $L_n$ , hydrogen,  $C_1$ - $C_{10}$  alkyl substituted with 0-3  $R^{17}$ , aryl substituted with 0-3  $R^{17}$ ,  $C_{1-10}$  cycloalkyl substituted with 0-3  $R^{17}$ , heterocyclo- $C_{1-10}$  alkyl substituted with 0-3  $R^{17}$ , wherein the heterocyclo group

<sup>B1</sup>  
~~R<sup>25</sup>, R<sup>25a</sup>, and R<sup>26</sup> are each independently selected at each occurrence from the group: hydrogen and C<sub>1</sub>-C<sub>6</sub> alkyl.~~

65. (Amended) A therapeutic radiopharmaceutical composition  
 5 comprising at least one agent selected from the group  
 consisting of a chemotherapeutic agent and a radiosensitizer  
 agent, or a pharmaceutically acceptable salt thereof, and a  
 radiopharmaceutical comprising:
- a) a therapeutic metal; and  
 10 b) a compound;  
 wherein the compound comprises:
- <sup>B2</sup>  
 i) a chelator capable of chelating the therapeutic metal;  
 ii) a targeting moiety; and  
 iii) 0-1 linking groups between the targeting moiety  
 15 and chelator; or  
 a pharmaceutically acceptable salt thereof,  
 wherein the targeting moiety is an indazole nonpeptide that  
 binds to a receptor that is upregulated during angiogenesis.
- 20 66. (Amended) A therapeutic radiopharmaceutical composition  
 according to claim 65, wherein the chemotherapeutic agent is  
 selected from the group consisting of mitomycin, tretinoin,  
 ribomustin, gemcitabine, vincristine, etoposide, cladribine,  
 mitobronitol, methotrexate, doxorubicin, carboquone,  
 25 pentostatin, nitracrine, zinostatin, cetorelix, letrozole,  
 raltitrexed, daunorubicin, fadrozole, fotemustine,  
 thymalfasin, sobuzoxane, nedaplatin, cytarabine, bicalutamide,  
 vinorelbine, vesnarinone, aminoglutethimide, amsacrine,  
 proglumide, elliptinium acetate, ketanserin, doxifluridine,  
 30 etretinate, isotretinoin, streptozocin, \nimustine, vindesine,  
 flutamide, drogenil, butocin, carmofur, razoxane, sizofilan,  
 carboplatin, mitolactol, tegafur, ifosfamide, prednimustine,  
 picibanil, levamisole, teniposide, improsulfan, enocitabine,  
 lisuride, oxymetholone, tamoxifen, progesterone, mepitiostane,  
 35 epitiostanol, formestane, interferon-alpha, interferon-2



is a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O, C<sub>6-10</sub> aryl-C<sub>1-10</sub> alkyl substituted with 0-3 R<sup>17</sup>, C<sub>1-10</sub> alkyl-C<sub>6-10</sub> aryl- substituted with 0-3 R<sup>17</sup>, a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O and substituted with 0-3 R<sup>17</sup>, and an electron, provided that when one of R<sup>13</sup> or R<sup>14</sup> is an electron, then the other is also an electron;

alternatively, R<sup>13</sup> and R<sup>14</sup> combine to form =C(R<sup>20</sup>)(R<sup>21</sup>);

R<sup>15</sup> and R<sup>16</sup> are each independently selected from the group: a bond to L<sub>n</sub>, -OH, C<sub>1-10</sub> alkyl substituted with 0-3 R<sup>17</sup>, C<sub>1-10</sub> alkyl substituted with 0-3 R<sup>17</sup>, aryl substituted with 0-3 R<sup>17</sup>, C<sub>3-10</sub> cycloalkyl substituted with 0-3 R<sup>17</sup>, heterocyclo-C<sub>1-10</sub> alkyl substituted with 0-3 R<sup>17</sup>, wherein the heterocyclo group is a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O, C<sub>6-10</sub> aryl-C<sub>1-10</sub> alkyl substituted with 0-3 R<sup>17</sup>, C<sub>1-10</sub> alkyl-C<sub>6-10</sub> aryl- substituted with 0-3 R<sup>17</sup>, and a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O and substituted with 0-3 R<sup>17</sup>;

R<sup>17</sup> is independently selected at each occurrence from the group: a bond to L<sub>n</sub>, =O, F, Cl, Br, I, -CF<sub>3</sub>, -CN, -CO<sub>2</sub>R<sup>18</sup>, -C(=O)R<sup>18</sup>, -C(=O)N(R<sup>18</sup>)<sub>2</sub>, -CHO, -CH<sub>2</sub>OR<sup>18</sup>, -OC(=O)R<sup>18</sup>, -OC(=O)OR<sup>18a</sup>, -OR<sup>18</sup>, -OC(=O)N(R<sup>18</sup>)<sub>2</sub>, -NR<sup>19</sup>C(=O)R<sup>18</sup>, -NR<sup>19</sup>C(=O)OR<sup>18a</sup>, -NR<sup>19</sup>C(=O)N(R<sup>18</sup>)<sub>2</sub>,

$-NR^{19}SO_2N(R^{18})_2$ ,  $-NR^{19}SO_2R^{18a}$ ,  $-SO_3H$ ,  $-SO_2R^{18a}$ ,  $-SR^{18}$ ,  
 $-S(=O)R^{18a}$ ,  $-SO_2N(R^{18})_2$ ,  $-N(R^{18})_2$ ,  $-NHC(=S)NHR^{18}$ ,  $=NOR^{18}$ ,  
 $NO_2$ ,  $-C(=O)NHR^{18}$ ,  $-C(=O)NHN(R^{18})R^{18a}$ ,  $-OCH_2CO_2H$ ,  
 5 2-(1-morpholino)ethoxy,  $C_1$ - $C_5$  alkyl,  $C_2$ - $C_4$  alkenyl,  $C_3$ - $C_6$   
 cycloalkyl,  $C_3$ - $C_6$  cycloalkylmethyl,  $C_2$ - $C_6$  alkoxyalkyl,  
 aryl substituted with 0-2  $R^{18}$ , and a 5-10 membered  
 heterocyclic ring system containing 1-4 heteroatoms  
 independently selected from N, S, and O;

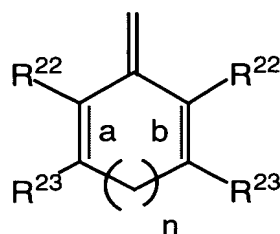
10  $R^{18}$ ,  $R^{18a}$ , and  $R^{19}$  are independently selected at each  
 occurrence from the group: a bond to  $L_n$ , H,  $C_1$ - $C_6$  alkyl,  
 phenyl, benzyl,  $C_1$ - $C_6$  alkoxy, halide, nitro, cyano, and  
 trifluoromethyl;

15  $Pg$  is a thiol protecting group;

$R^{20}$  and  $R^{21}$  are independently selected from the group: H,  
 $C_1$ - $C_{10}$  alkyl,  $-CN$ ,  $-CO_2R^{25}$ ,  $-C(=O)R^{25}$ ,  $-C(=O)N(R^{25})_2$ ,  
 $C_2$ - $C_{10}$  1-alkene substituted with 0-3  $R^{23}$ ,  $C_2$ - $C_{10}$  1-alkyne  
 20 substituted with 0-3  $R^{23}$ , aryl substituted with 0-3  $R^{23}$ ,  
 unsaturated 5-10 membered heterocyclic ring system  
 containing 1-4 heteroatoms independently selected from N,  
 S, and O and substituted with 0-3  $R^{23}$ , and unsaturated  
 $C_3$ - $C_{10}$  carbocycle substituted with 0-3  $R^{23}$ ;

25

alternatively,  $R^{20}$  and  $R^{21}$ , taken together with the divalent  
 carbon radical to which they are attached form:



$R^{22}$  and  $R^{23}$  are independently selected from the group: H,  $R^{24}$ ,  
 C<sub>1</sub>-C<sub>10</sub> alkyl substituted with 0-3  $R^{24}$ , C<sub>2</sub>-C<sub>10</sub> alkenyl  
 5 substituted with 0-3  $R^{24}$ , C<sub>2</sub>-C<sub>10</sub> alkynyl substituted with  
 0-3  $R^{24}$ , aryl substituted with 0-3  $R^{24}$ , a 5-10 membered  
 heterocyclic ring system containing 1-4 heteroatoms  
 independently selected from N, S, and O and substituted  
 with 0-3  $R^{24}$ , and C<sub>3</sub>-<sub>10</sub> carbocycle substituted with 0-3  
 10  $R^{24}$ ;

alternatively,  $R^{22}$ ,  $R^{23}$  taken together form a fused aromatic or  
 a 5-10 membered heterocyclic ring system containing 1-4  
 heteroatoms independently selected from N, S, and O;

15 **a** and **b** indicate the positions of optional double bonds and **n**  
 is 0 or 1;

$R^{24}$  is independently selected at each occurrence from the  
 20 group: =O, F, Cl, Br, I, -CF<sub>3</sub>, -CN, -CO<sub>2</sub>R<sup>25</sup>, -C(=O)R<sup>25</sup>,  
 -C(=O)N(R<sup>25</sup>)<sub>2</sub>, -N(R<sup>25</sup>)<sub>3</sub><sup>+</sup>, -CH<sub>2</sub>OR<sup>25</sup>, -OC(=O)R<sup>25</sup>,  
 -OC(=O)OR<sup>25a</sup>, -OR<sup>25</sup>, -OC(=O)N(R<sup>25</sup>)<sub>2</sub>, -NR<sup>26</sup>C(=O)R<sup>25</sup>,  
 -NR<sup>26</sup>C(=O)OR<sup>25a</sup>, -NR<sup>26</sup>C(=O)N(R<sup>25</sup>)<sub>2</sub>, -NR<sup>26</sup>SO<sub>2</sub>N(R<sup>25</sup>)<sub>2</sub>,  
 -NR<sup>26</sup>SO<sub>2</sub>R<sup>25a</sup>, -SO<sub>3</sub>H, -SO<sub>2</sub>R<sup>25a</sup>, -SR<sup>25</sup>, -S(=O)R<sup>25a</sup>,  
 25 -SO<sub>2</sub>N(R<sup>25</sup>)<sub>2</sub>, -N(R<sup>25</sup>)<sub>2</sub>, =NOR<sup>25</sup>, -C(=O)NHOR<sup>25</sup>, -OCH<sub>2</sub>CO<sub>2</sub>H, and  
 2-(1-morpholino)ethoxy; and,

alpha, interferon-beta, interferon-gamma, colony stimulating factor-1, colony stimulating factor-2, denileukin diftotox, interleukin-2, and leutinizing hormone releasing factor.

5 67. (Amended) A therapeutic radiopharmaceutical composition according to claim 65, wherein radiosensitizer agent is selected from the group consisting of 2-(3-nitro-1,2,4-triazol-1-yl)-N-(2-methoxyethyl)acetamide, N-(3-nitro-4-quinolinyl)-4-morpholinecarboxamidine, 3-amino-1,2,4-benzotriazine-1,4-dioxide, N-(2-hydroxyethyl)-2-nitroimidazole-1-acetamide, 1-(2-nitroimidazol-1-yl)-3-(1-piperidinyl)-2-propanol, and 1-(2-nitro-1-imidazolyl)-3-(1-aziridino)-2-propanol.

15 68. (Amended) A method of treating cancer in a patient comprising: administering to a patient in need thereof a therapeutic radiopharmaceutical and at least one agent selected from the group consisting of a chemotherapeutic agent and a radiosensitizer agent, or a pharmaceutically acceptable salt thereof wherein the therapeutic radiopharmaceutical  
20 comprises:

- a) a therapeutic metal; and
- b) a compound;

wherein the compound comprises:

- i) a chelator capable of chelating the therapeutic metal;
- 25 ii) a targeting moiety; and
- iii) 0-1 linking groups between the targeting moiety and chelator; or

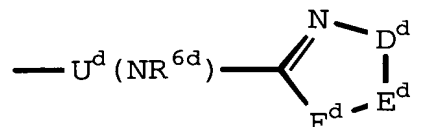
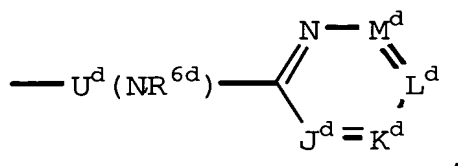
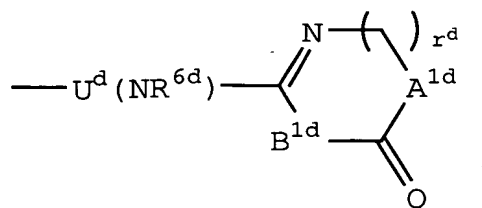
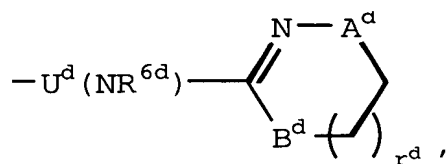
a pharmaceutically acceptable salt thereof;

wherein the targeting moiety is an indazole non-peptide that  
30 binds to a receptor that is upregulated during angiogenesis.

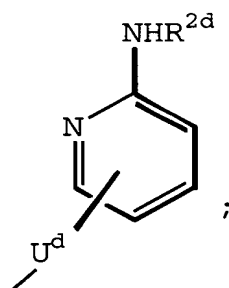
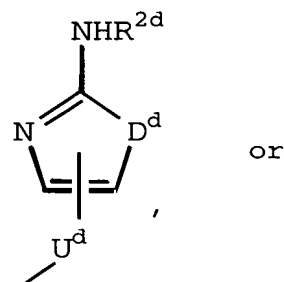
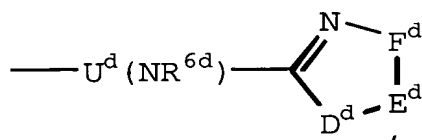
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76. (New) A kit according to claim 58, wherein:

$R^{1de}$  is selected from:



B3



5 A<sup>d</sup> and B<sup>d</sup> are independently -CH<sub>2</sub>-, -O-, -N(R<sup>2d</sup>)-, or -C(=O)-;

A<sup>1d</sup> and B<sup>1d</sup> are independently -CH<sub>2</sub>- or -N(R<sup>3d</sup>)-;

D<sup>d</sup> is -N(R<sup>2d</sup>)-, -O-, -S-, -C(=O)- or -SO<sub>2</sub>-;

$E^d - F^d$  is  $-C(R^{4d})=C(R^{5d})-$ ,  $-N=C(R^{4d})-$ ,  $-C(R^{4d})=N-$ , or  $-C(R^{4d})_2C(R^{5d})_2-$ ;

$J^d$ ,  $K^d$ ,  $L^d$  and  $M^d$  are independently selected from:  $C(R^{4d})-$ ,  $-C(R^{5d})-$  and  $-N-$ , provided that at least one of  $J^d$ ,  $K^d$ ,  $L^d$  and  $M^d$  is not  $-N-$ ;

$R^{2d}$  is selected from: H,  $C_1-C_6$  alkyl,  $(C_1-C_6$  alkyl)carbonyl,  $(C_1-C_6$  alkoxy)carbonyl,  $C_1-C_6$  alkylaminocarbonyl,  $C_3-C_6$  alkenyl,  $C_3-C_7$  cycloalkyl,  $C_4-C_{11}$  cycloalkylalkyl, aryl, heteroaryl( $C_1-C_6$  alkyl)carbonyl, heteroarylcarbonyl, aryl( $C_1-C_6$  alkyl)-,  $(C_1-C_6$  alkyl)carbonyl, arylcarbonyl, alkylsulfonyl, arylsulfonyl, aryl( $C_1-C_6$  alkyl)sulfonyl, heteroarylsulfonyl, heteroaryl( $C_1-C_6$  alkyl)sulfonyl, aryloxy carbonyl, and aryl( $C_1-C_6$  alkoxy)carbonyl, wherein said aryl groups are substituted with 0-2 substituents selected from the group consisting of  $C_1-C_4$  alkyl,  $C_1-C_4$  alkoxy, halo,  $CF_3$ , and nitro;

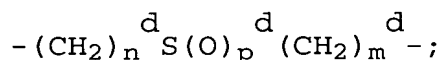
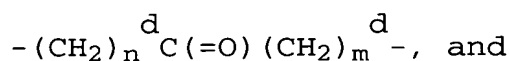
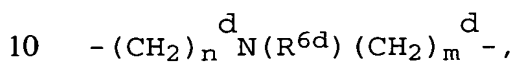
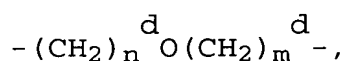
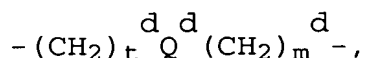
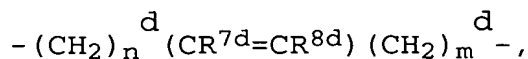
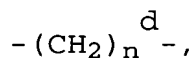
$R^{3d}$  is selected from: H,  $C_1-C_6$  alkyl,  $C_3-C_7$  cycloalkyl,  $C_4-C_{11}$  cycloalkylalkyl, aryl, aryl( $C_1-C_6$  alkyl)-, and heteroaryl( $C_1-C_6$  alkyl)-;

$R^{4d}$  and  $R^{5d}$  are independently selected from: H,  $C_1-C_4$  alkoxy,  $NR^{2d}R^{3d}$ , halogen,  $NO_2$ , CN,  $CF_3$ ,  $C_1-C_6$  alkyl,  $C_3-C_6$  alkenyl,  $C_3-C_7$  cycloalkyl,  $C_4-C_{11}$  cycloalkylalkyl, aryl, aryl( $C_1-C_6$  alkyl)-,  $C_2-C_7$  alkylcarbonyl, and arylcarbonyl;

alternatively, when substituents on adjacent atoms,  $R^{4d}$  and  $R^{5d}$  can be taken together with the carbon atoms to which they are attached to form a 5-7 membered carbocyclic or 5-7

membered heterocyclic aromatic or non-aromatic ring system, said carbocyclic or heterocyclic ring being optionally substituted with 0-2 groups selected from: C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> alkoxy, halo, cyano, amino, CF<sub>3</sub>, or NO<sub>2</sub>;

5 U<sup>d</sup> is selected from:



wherein one or more of the methylene groups in U<sup>d</sup> is

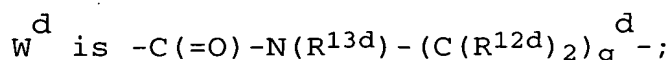
15 optionally substituted with R<sup>7d</sup>;

Q<sup>d</sup> is selected from 1,2-phenylene, 1,3-phenylene, 2,3-pyridinylene, 3,4-pyridinylene, and 2,4-pyridinylene;

20 R<sup>6d</sup> is selected from: H, C<sub>1</sub>-C<sub>4</sub> alkyl, and benzyl;

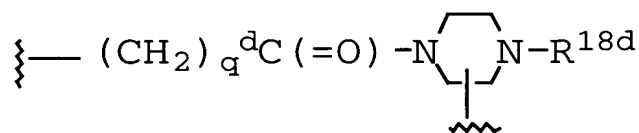
R<sup>7d</sup> and R<sup>8d</sup> are independently selected from: H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>7</sub> cycloalkyl, C<sub>4</sub>-C<sub>11</sub> cycloalkylalkyl, aryl, aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-, and

25 heteroaryl(C<sub>0</sub>-C<sub>6</sub> alkyl)-;



$X^d$  is  $-C(R^{12d})(R^{14d})-C(R^{12d})(R^{15d})-$ ;

alternatively,  $W^d$  and  $X^d$  can be taken together to be

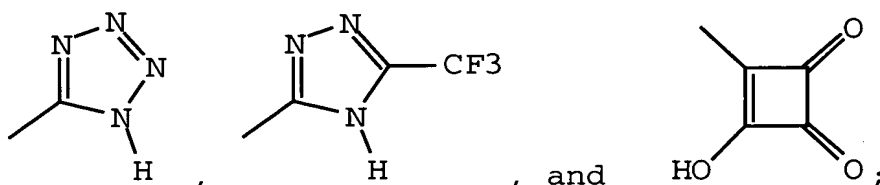


5

$R^{12d}$  is H or  $C_1-C_6$  alkyl;

$Y^d$  is selected from:

10  $-COR^{19d}$ ,  $-SO_3H$ ,



15  $d$  is selected from 1, 2, 3, 4, and 5;

$d'$  is 1-50;

$W$  is independently selected at each occurrence from the group:

20  $O$ ,  $NH$ ,  $NHC(=O)$ ,  $C(=O)NH$ ,  $NR^8C(=O)$ ,  $C(=O)NR^8$ ,  $C(=O)$ ,  
 $C(=O)O$ ,  $OC(=O)$ ,  $NHC(=S)NH$ ,  $NHC(=O)NH$ ,  $SO_2$ ,  $(OCH_2CH_2)_s$ ,  
 $(CH_2CH_2O)_s$ ,  $(OCH_2CH_2CH_2)_s$ ,  $(CH_2CH_2CH_2O)_t$ , and  $(aa)_t$ ;

$aa$  is independently at each occurrence an amino acid;

25

$Z$  is selected from the group: aryl substituted with 0-1  $R^{10}$ ,  
 $C_{3-10}$  cycloalkyl substituted with 0-1  $R^{10}$ , and a 5-10



membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O and substituted with 0-1  $R^{10}$ ;

- 5  $R^6$ ,  $R^{6a}$ ,  $R^7$ ,  $R^{7a}$ , and  $R^8$  are independently selected at each occurrence from the group: H, =O, COOH,  $SO_3H$ ,  $C_1-C_5$  alkyl substituted with 0-1  $R^{10}$ , aryl substituted with 0-1  $R^{10}$ , benzyl substituted with 0-1  $R^{10}$ , and  $C_1-C_5$  alkoxy substituted with 0-1  $R^{10}$ ,  $NHC(=O)R^{11}$ ,  $C(=O)NHR^{11}$ ,  
 10  $NHC(=O)NHR^{11}$ ,  $NHR^{11}$ ,  $R^{11}$ , and a bond to  $C_h$ ;

$\beta^3$   
 k is 0 or 1;

s is selected from 0, 1, 2, 3, 4, and 5;

s' is selected from 0, 1, 2, 3, 4, and 5;

- 15 s'' is selected from 0, 1, 2, 3, 4, and 5;

t is selected from 0, 1, 2, 3, 4, and 5;

- $A^1$ ,  $A^2$ ,  $A^3$ ,  $A^4$ ,  $A^5$ ,  $A^6$ ,  $A^7$ , and  $A^8$  are independently selected at each occurrence from the group:  $NR^{13}$ ,  $NR^{13}R^{14}$ , S, SH,  
 20  $S(Pg)$ , OH, and a bond to  $L_n$ ;

- E is a bond, CH, or a spacer group independently selected at each occurrence from the group:  $C_1-C_{10}$  alkyl substituted with 0-3  $R^{17}$ , aryl substituted with 0-3  $R^{17}$ ,  $C_{3-10}$   
 25 cycloalkyl substituted with 0-3  $R^{17}$ , and a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O and substituted with 0-3  $R^{17}$ ;

- 30  $R^{13}$  and  $R^{14}$  are each independently selected from the group: a bond to  $L_n$ , hydrogen,  $C_1-C_{10}$  alkyl substituted with 0-3  $R^{17}$ , aryl substituted with 0-3  $R^{17}$ , a 5-10 membered

heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O and substituted with 0-3 R<sup>17</sup>, and an electron, provided that when one of R<sup>13</sup> or R<sup>14</sup> is an electron, then the other is also an electron;

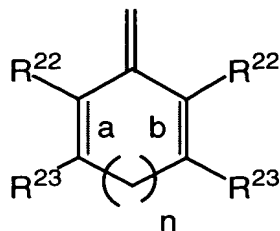
alternatively, R<sup>13</sup> and R<sup>14</sup> combine to form =C(R<sup>20</sup>)(R<sup>21</sup>);

R<sup>17</sup> is independently selected at each occurrence from the group: a bond to L<sub>n</sub>, =O, F, Cl, Br, I, -CF<sub>3</sub>, -CN, -CO<sub>2</sub>R<sup>18</sup>, -C(=O)R<sup>18</sup>, -C(=O)N(R<sup>18</sup>)<sub>2</sub>, -CH<sub>2</sub>OR<sup>18</sup>, -OC(=O)R<sup>18</sup>, -OC(=O)OR<sup>18a</sup>, -OR<sup>18</sup>, -OC(=O)N(R<sup>18</sup>)<sub>2</sub>, -NR<sup>19</sup>C(=O)R<sup>18</sup>, -NR<sup>19</sup>C(=O)OR<sup>18a</sup>, -NR<sup>19</sup>C(=O)N(R<sup>18</sup>)<sub>2</sub>, -NR<sup>19</sup>SO<sub>2</sub>N(R<sup>18</sup>)<sub>2</sub>, -NR<sup>19</sup>SO<sub>2</sub>R<sup>18a</sup>, -SO<sub>3</sub>H, -SO<sub>2</sub>R<sup>18a</sup>, -S(=O)R<sup>18a</sup>, -SO<sub>2</sub>N(R<sup>18</sup>)<sub>2</sub>, -N(R<sup>18</sup>)<sub>2</sub>, -NHC(=S)NHR<sup>18</sup>, =NOR<sup>18</sup>, -C(=O)NHN(R<sup>18</sup>)R<sup>18a</sup>, -OCH<sub>2</sub>CO<sub>2</sub>H, and 2-(1-morpholino)ethoxy;

R<sup>18</sup>, R<sup>18a</sup>, and R<sup>19</sup> are independently selected at each occurrence from the group: a bond to L<sub>n</sub>, H, and C<sub>1</sub>-C<sub>6</sub> alkyl;

R<sup>20</sup> and R<sup>21</sup> are independently selected from the group: H, C<sub>1</sub>-C<sub>5</sub> alkyl, -CO<sub>2</sub>R<sup>25</sup>, C<sub>2</sub>-C<sub>5</sub> 1-alkene substituted with 0-3 R<sup>23</sup>, C<sub>2</sub>-C<sub>5</sub> 1-alkyne substituted with 0-3 R<sup>23</sup>, aryl substituted with 0-3 R<sup>23</sup>, and unsaturated 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O and substituted with 0-3 R<sup>23</sup>;

alternatively, R<sup>20</sup> and R<sup>21</sup>, taken together with the divalent carbon radical to which they are attached form:



$R^{22}$  and  $R^{23}$  are independently selected from the group: H, and  $R^{24}$ ;

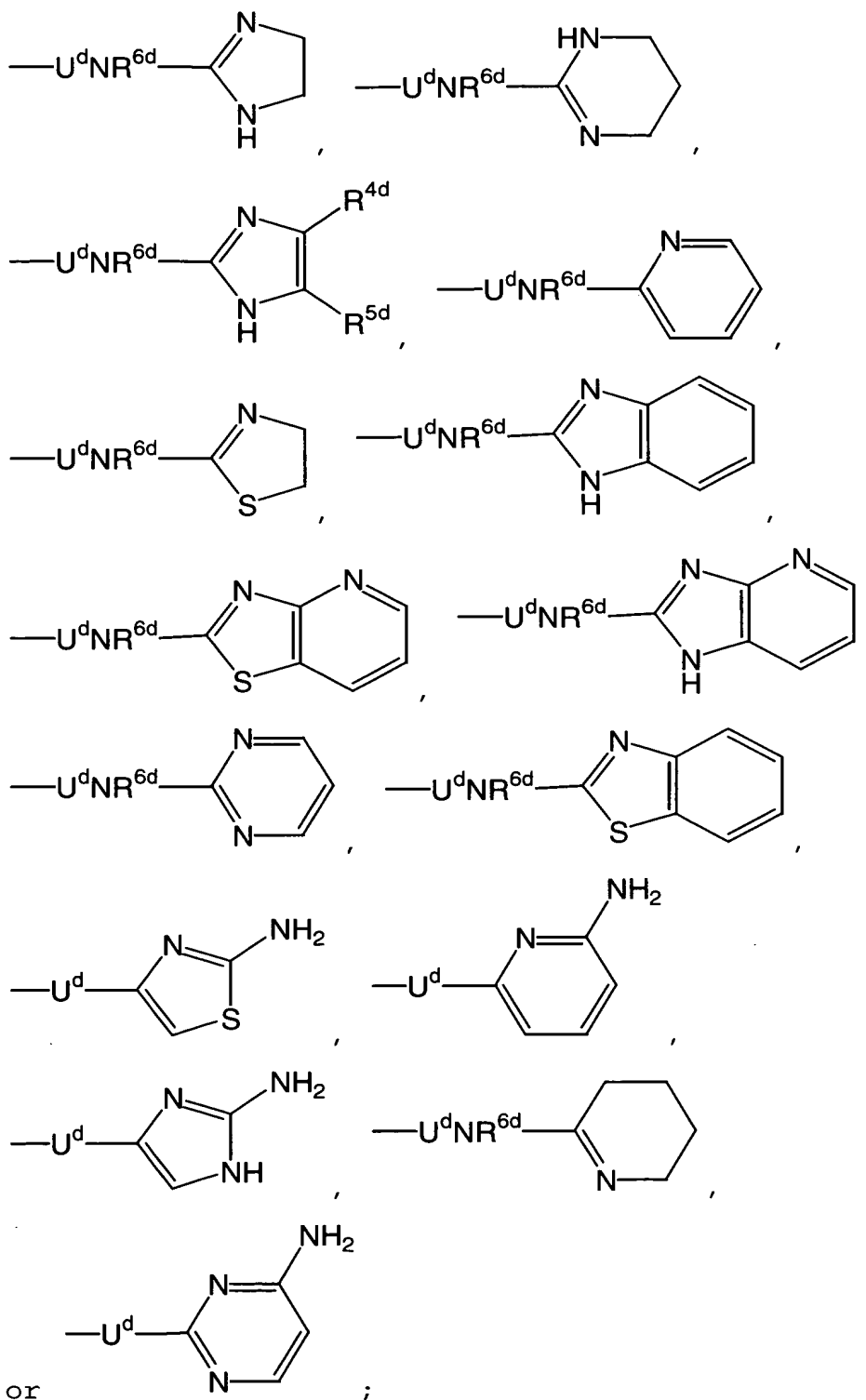
5

alternatively,  $R^{22}$ ,  $R^{23}$  taken together form a fused aromatic or a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O;

$\beta^3$  10  $R^{24}$  is independently selected at each occurrence from the group:  $-\text{CO}_2R^{25}$ ,  $-\text{C}(=\text{O})\text{N}(R^{25})_2$ ,  $-\text{CH}_2\text{OR}^{25}$ ,  $-\text{OC}(=\text{O})R^{25}$ ,  $-\text{OR}^{25}$ ,  $-\text{SO}_3\text{H}$ ,  $-\text{N}(R^{25})_2$ , and  $-\text{OCH}_2\text{CO}_2\text{H}$ ; and,

15  $R^{25}$  is independently selected at each occurrence from the group: H and  $\text{C}_1\text{-C}_3$  alkyl.

77. (New) A kit according to claim 58, wherein:

R<sup>1de</sup> is selected from:

wherein the above heterocycles are optionally substituted with  
 0-2 substituents selected from the group:  $\text{NH}_2$ , halogen,  
 $\text{NO}_2$ ,  $\text{CN}$ ,  $\text{CF}_3$ ,  $\text{C}_1\text{-C}_4$  alkoxy,  $\text{C}_1\text{-C}_6$  alkyl, and  $\text{C}_3\text{-C}_7$   
 cycloalkyl;

5

$\text{U}^{\text{d}}$  is  $-(\text{CH}_2)_n-$ ,  $-(\text{CH}_2)_t \text{Q}^{\text{d}} (\text{CH}_2)_m^{\text{d}}$  or  $-\text{C}(=\text{O})(\text{CH}_2)_n^{\text{d}}-$ , wherein  
 one of the methylene groups is optionally substituted  
 with  $\text{R}^{7\text{d}}$ ;

10  $\text{R}^{7\text{d}}$  is selected from:  $\text{C}_1\text{-C}_6$  alkyl,  $\text{C}_3\text{-C}_7$  cycloalkyl,  $\text{C}_4\text{-C}_{11}$   
 cycloalkylalkyl, aryl, aryl( $\text{C}_1\text{-C}_6$  alkyl), heteroaryl, and  
 heteroaryl( $\text{C}_1\text{-C}_6$  alkyl);

B<sup>3</sup>

$\text{R}^{10\text{d}}$  is selected from: H,  $\text{R}^{1\text{de}}$ ,  $\text{C}_1\text{-C}_4$  alkoxy substituted with  
 15 0-1  $\text{R}^{21\text{d}}$ , halogen,  $\text{CO}_2\text{R}^{17\text{d}}$ ,  $\text{CONR}^{17\text{d}}\text{R}^{20\text{d}}$ ,  $\text{C}_1\text{-C}_6$  alkyl  
 substituted with 0-1  $\text{R}^{15\text{d}}$  or 0-1  $\text{R}^{21\text{d}}$ ,  $\text{C}_3\text{-C}_7$  cycloalkyl  
 substituted with 0-1  $\text{R}^{15\text{d}}$  or 0-1  $\text{R}^{21\text{d}}$ ,  $\text{C}_4\text{-C}_{11}$   
 cycloalkylalkyl substituted with 0-1  $\text{R}^{15\text{d}}$  or 0-1  $\text{R}^{21\text{d}}$ , and  
 aryl( $\text{C}_1\text{-C}_6$  alkyl)- substituted with 0-1  $\text{R}^{15\text{d}}$  or 0-2  $\text{R}^{11\text{d}}$  or  
 20 0-1  $\text{R}^{21\text{d}}$ ;

$\text{R}^{10\text{de}}$  is selected from: H,  $\text{C}_1\text{-C}_4$  alkoxy substituted with 0-1  
 $\text{R}^{21\text{d}}$ , halogen,  $\text{CO}_2\text{R}^{17\text{d}}$ ,  $\text{CONR}^{17\text{d}}\text{R}^{20\text{d}}$ ,  $\text{C}_1\text{-C}_6$  alkyl  
 substituted with 0-1  $\text{R}^{15\text{d}}$  or 0-1  $\text{R}^{21\text{d}}$ ,  $\text{C}_3\text{-C}_7$  cycloalkyl  
 25 substituted with 0-1  $\text{R}^{15\text{d}}$  or 0-1  $\text{R}^{21\text{d}}$ ,  $\text{C}_4\text{-C}_{11}$   
 cycloalkylalkyl substituted with 0-1  $\text{R}^{15\text{d}}$  or 0-1  $\text{R}^{21\text{d}}$ , and  
 aryl( $\text{C}_1\text{-C}_6$  alkyl)- substituted with 0-1  $\text{R}^{15\text{d}}$  or 0-2  $\text{R}^{11\text{d}}$  or  
 0-1  $\text{R}^{21\text{d}}$ ;

30  $\text{W}^{\text{d}}$  is  $-\text{C}(=\text{O})-\text{N}(\text{R}^{13\text{d}})-$ ;

$X^d$  is  $-CH(R^{14d})-CH(R^{15d})-$ ;

$R^{13d}$  is H or  $CH_3$ ;

5  $R^{14d}$  is selected from:

H,  $C_1$ - $C_{10}$  alkyl, aryl, or heteroaryl, wherein said aryl or heteroaryl groups are optionally substituted with 0-3 substituents selected from the group consisting of:  $C_1$ - $C_4$  alkyl,  $C_1$ - $C_4$  alkoxy, aryl, halo, cyano, amino,  $CF_3$ , and  
10  $NO_2$ ;

$R^{15d}$  is H or  $R^{16d}$ ;

$Y^d$  is  $-COR^{19d}$ ;

15

$R^{19d}$  is selected from:

hydroxy,  $C_1$ - $C_{10}$  alkoxy,

methylcarbonyloxymethoxy-,

ethylcarbonyloxymethoxy-,

20 *t*-butylcarbonyloxymethoxy-,

cyclohexylcarbonyloxymethoxy-,

1-(methylcarbonyloxy)ethoxy-,

1-(ethylcarbonyloxy)ethoxy-,

1-(*t*-butylcarbonyloxy)ethoxy-,

25 1-(cyclohexylcarbonyloxy)ethoxy-,

*i*-propyloxy carbonyloxymethoxy-,

*t*-butyloxy carbonyloxymethoxy-,

1-(*i*-propyloxy carbonyloxy)ethoxy-,

1-(cyclohexyloxy carbonyloxy)ethoxy-,

30 1-(*t*-butyloxy carbonyloxy)ethoxy-,

dimethylaminoethoxy-,

diethylaminoethoxy-,

(5-methyl-1,3-dioxacyclopenten-2-on-4-yl)methoxy-,  
 (5-(*t*-butyl)-1,3-dioxacyclopenten-2-on-4-yl)methoxy-,  
 (1,3-dioxa-5-phenyl-cyclopenten-2-on-4-yl)methoxy-, and  
 1-(2-(2-methoxypropyl)carbonyloxy)ethoxy-;

5

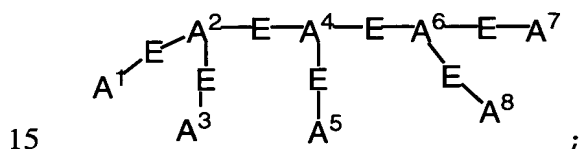
$R^{20d}$  is H or  $CH_3$ ;

$m^d$  is 0 or 1;

$n^d$  is 1-4;

10  $t^d$  is 0 or 1;

$C_h$  is



$A^1$  is selected from the group: OH, and a bond to  $L_n$ ;

$A^2$ ,  $A^4$ , and  $A^6$  are each N;

20

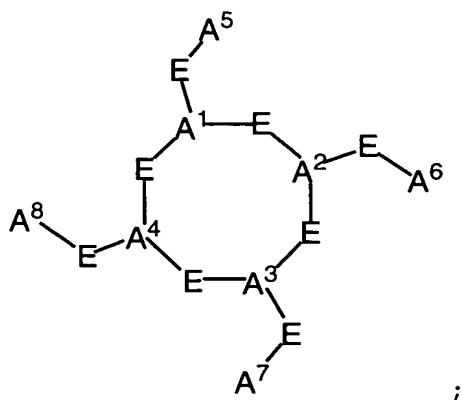
$A^3$ ,  $A^5$ , and  $A^8$  are each OH;

$A^7$  is a bond to  $L_n$  or NH-bond to  $L_n$ ;

25 E is a  $C_2$  alkyl substituted with 0-1  $R^{17}$ ;

$R^{17}$  is =O;

alternatively,  $C_h$  is



5 A<sup>1</sup> is selected from the group: OH and a bond to L<sub>n</sub>;

13 A<sup>2</sup>, A<sup>3</sup> and A<sup>4</sup> are each N;

A<sup>5</sup>, A<sup>6</sup> and A<sup>8</sup> are each OH;

10

A<sup>7</sup> is a bond to L<sub>n</sub>;

E is a C<sub>2</sub> alkyl substituted with 0-1 R<sup>17</sup>;

15 R<sup>17</sup> is =O;

alternatively, C<sub>h</sub> is  $\begin{matrix} & E & \\ & | & \\ A^1 & - & A^2 \end{matrix}$ ;

A<sup>1</sup> is NH<sub>2</sub> or N=C(R<sup>20</sup>)(R<sup>21</sup>);

20 E is a bond;

A<sup>2</sup> is NHR<sup>13</sup>;

25 R<sup>13</sup> is a heterocycle substituted with R<sup>17</sup>, the heterocycle being selected from pyridine and pyrimidine;



R<sup>17</sup> is selected from a bond to L<sub>n</sub>, C(=O)NHR<sup>18</sup> and C(=O)R<sup>18</sup>;

R<sup>18</sup> is a bond to L<sub>n</sub>;

5

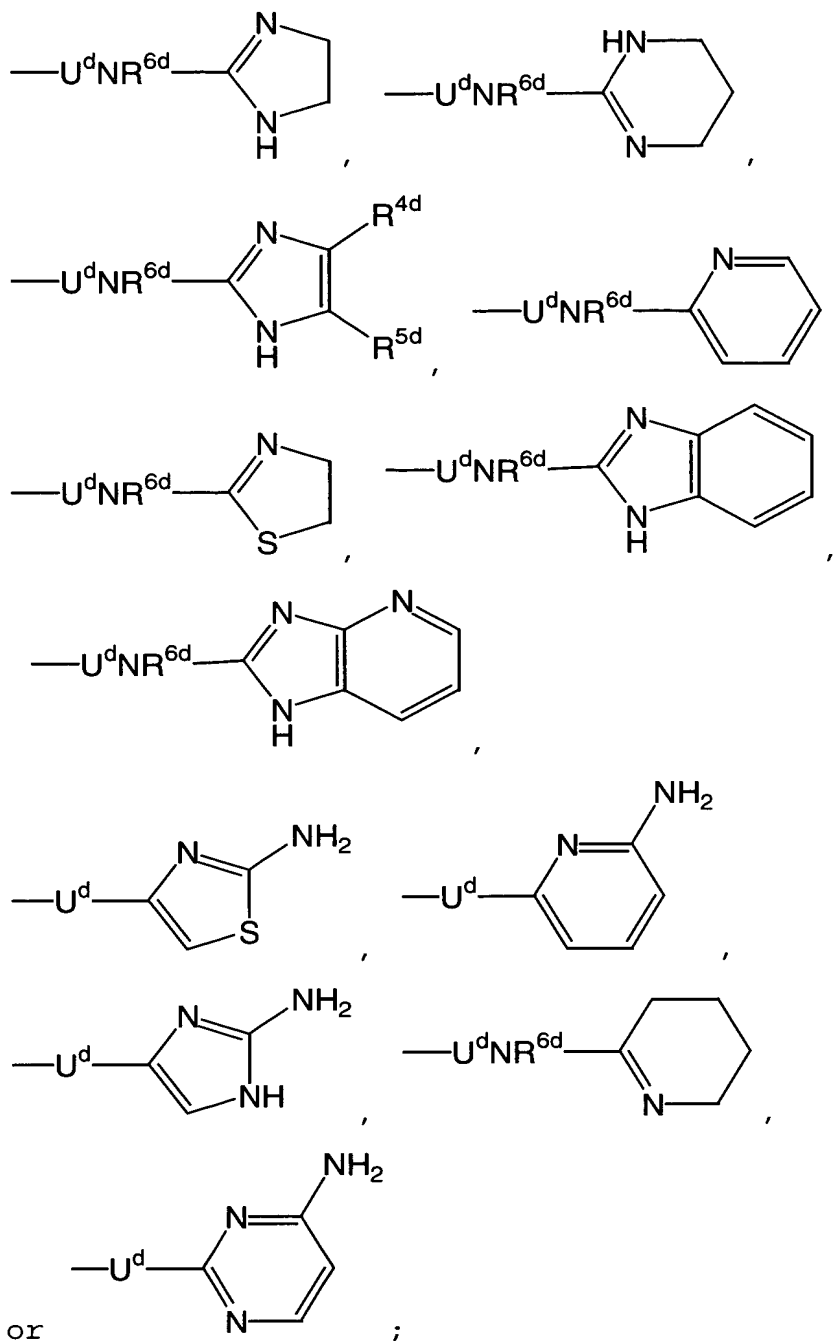
R<sup>24</sup> is selected from the group: -CO<sub>2</sub>R<sup>25</sup>, -OR<sup>25</sup>, -SO<sub>3</sub>H, and  
-N(R<sup>25</sup>)<sub>2</sub>; and,

10 R<sup>25</sup> is independently selected at each occurrence from the  
group: hydrogen and methyl.

78. (New) A kit according to claim 58, wherein:

B<sup>3</sup>

R<sup>1de</sup> is selected from:



wherein the above heterocycles are optionally substituted with 0-2 substituents selected from the group: NH<sub>2</sub>, halogen, NO<sub>2</sub>, CN, CF<sub>3</sub>, C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>6</sub> alkyl, and C<sub>3</sub>-C<sub>7</sub> cycloalkyl.

79. (New) A kit according to claim 104, wherein the compound is selected from the group:

5 2-(((4-(4-(((3-(2-(2-(3-((6-((1-aza-2-(2-sulfophenyl)vinyl)amino)(3-pyridyl))carbonylamino)propoxy)-ethoxy)ethoxy)propyl)amino)sulfonyl)-phenyl)phenyl)sulfonyl)amino)-3-((1-(3-(imidazole-2-ylamino)propyl)(1H-indazol-5-yl))carbonylamino)propanoic acid;

2-(2-aza-2-((5-(N-(1,3-bis(3-(2-(2-(3-(((4-(4-(((1-carboxy-2-((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))-carbonylamino)ethyl)amino)sulfonyl)-phenyl)phenyl)sulfonyl)amino)propoxy)-ethoxy)ethoxy)propyl)carbamoyl)propyl)carbamoyl)(2-pyridyl))amino)vinyl)benzenesulfonic acid;

20 2-((6-((1-aza-2-(sulfophenyl)vinyl)amino)(3-pyridyl))carbonylamino)-4-(N-(3-(2-(2-(3-(((4-(4-(((1-carboxy-2-((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonylamino)ethyl)amino)sulfonyl)-phenyl)phenyl)sulfonyl)amino)propoxy)-ethoxy)ethoxy)propyl)carbamoyl)butanoic acid;

3-((1-(3-(imidazole-2-ylamino)propyl)(1H-indazol-5-yl))carbonylamino)-2-(((4-(4-(((3-(2-(2-(3-(2-(1,4,7,10-tetraaza-4,7,10-tris(carboxymethyl)cyclododecyl)-acetylaminopropoxy)ethoxy)ethoxy)propyl)amino)sulfonyl)-phenyl)phenyl)sulfonyl)amino)propanoic acid;

2-(6-((6-((1-aza-2-(2-sulfophenyl)vinyl)-amino)(3-pyridyl))carbonylamino)hexanoylamino)-3-((1-(3-(imidazol-

2-ylamino)propyl)(1H-indazol-5-yl))carbonylamino)-  
propanoic acid;

5 2-((6-((1-aza-2-(2-sulfophenyl)vinyl)-amino)(3-  
pyridyl))carbonylamino)-3-((1-(3-(imidazol-2-  
ylamino)propyl)(1H-indazol-5-yl))carbonylamino)propanoic  
acid;

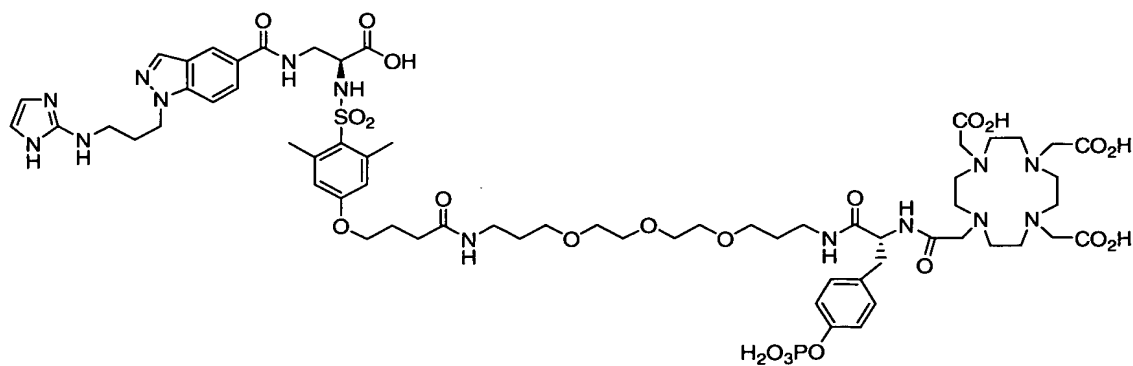
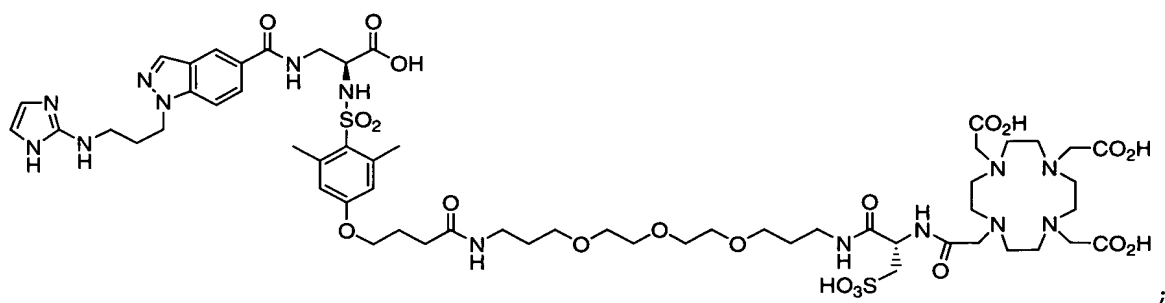
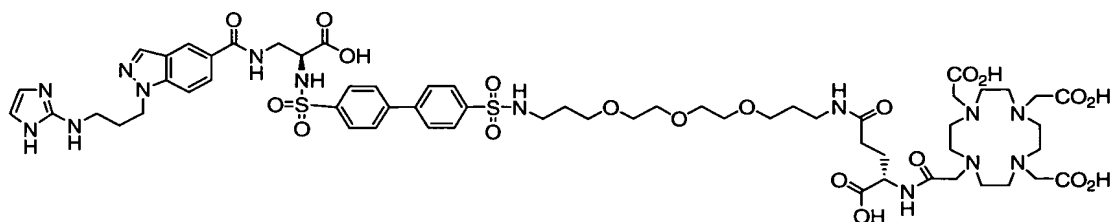
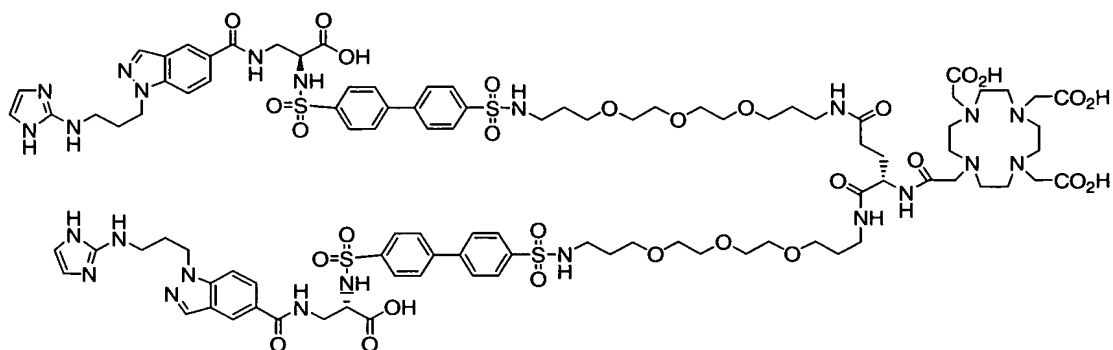
10 [2-[[[5-[carbonyl]-2-pyridinyl]hydrazono]methyl]-  
benzenesulfonic acid]-Glu(2-(6-aminohexanoylamino)-3-((1-  
3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonyl-  
amino)propanoic acid)(2-(6-aminohexanoylamino)-3-((1-(3-  
imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonyl-  
amino)propanoic acid);

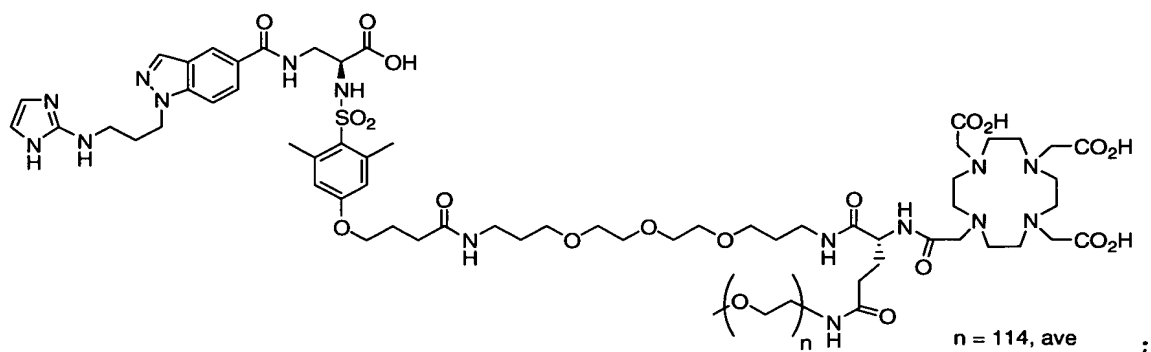
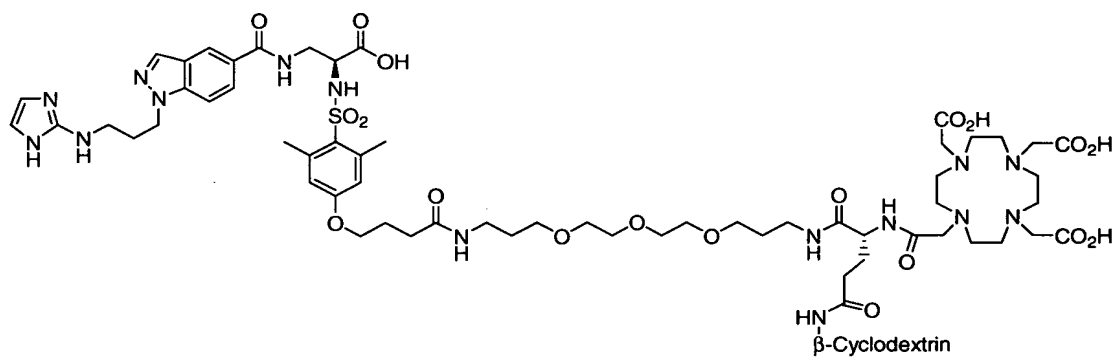
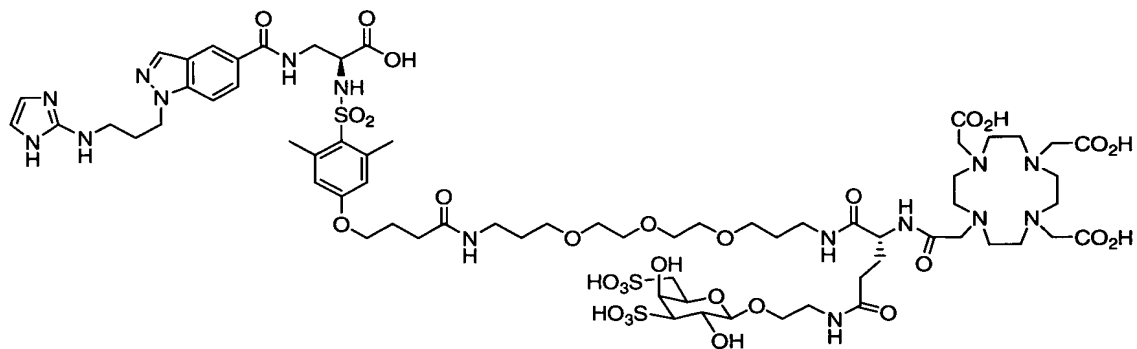
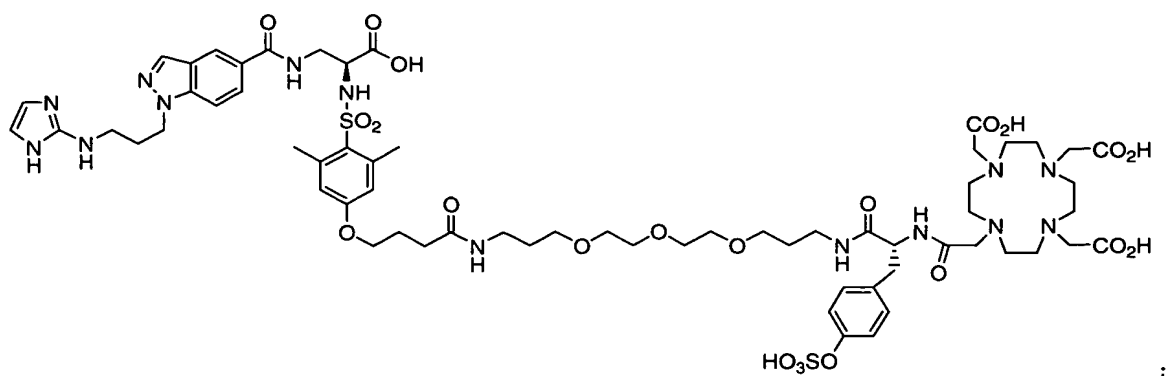
15 [2-[[[5-[carbonyl]-2-pyridinyl]hydrazono]methyl]-  
benzenesulfonic acid]-Glu-bis-[Glu(2-(6-  
Aminohexanoylamino)-3-((1-(3-(imidazol-2-  
ylamino)propyl)(1H-indazol-5-yl))carbonyl-amino)propanoic  
20 acid)(2-(6-aminohexanoylamino)-3-((1-(3-(imidazol-2-  
ylamino)propyl)(1H-indazol-5-yl))carbonyl-amino)propanoic  
acid)];

25 2-(1,4,7,10-tetraaza-4,7,10-tris(carboxymethyl)-1-  
cyclododecyl)acetyl-{2-(6-aminohexanoylamino)-3-((1-(3-  
(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonyl-  
amino)propanoic acid};

30 2-(1,4,7,10-tetraaza-4,7,10-tris(carboxymethyl)-1-  
cyclododecyl)acetyl-Glu{2-(6-Aminohexanoylamino)-3-((1-  
(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonyl-  
amino)propanoic acid}{2-(6-Aminohexanoylamino)-3-((1-(3-

(imidazol-2-ylamino)propyl) (1H-indazol-5-yl)) carbonyl-  
amino)propanoic acid};

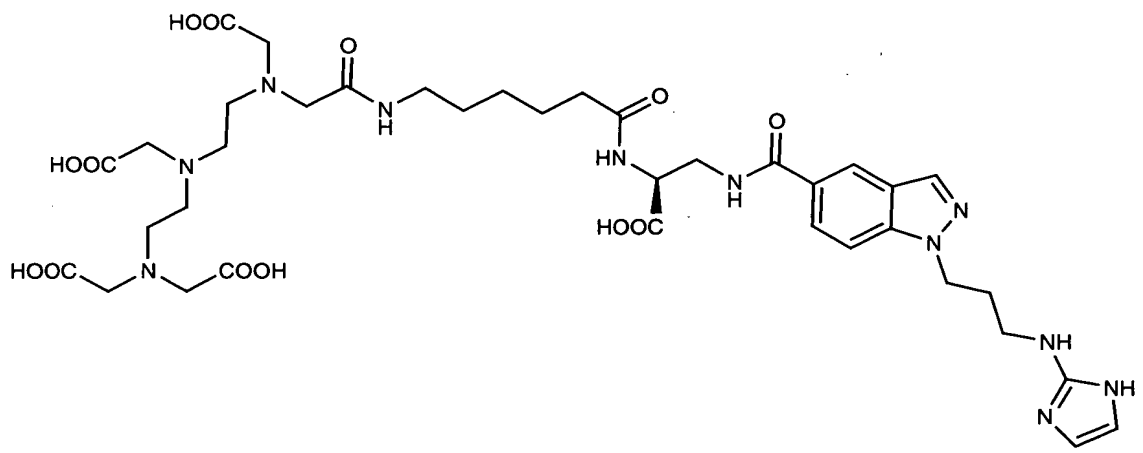
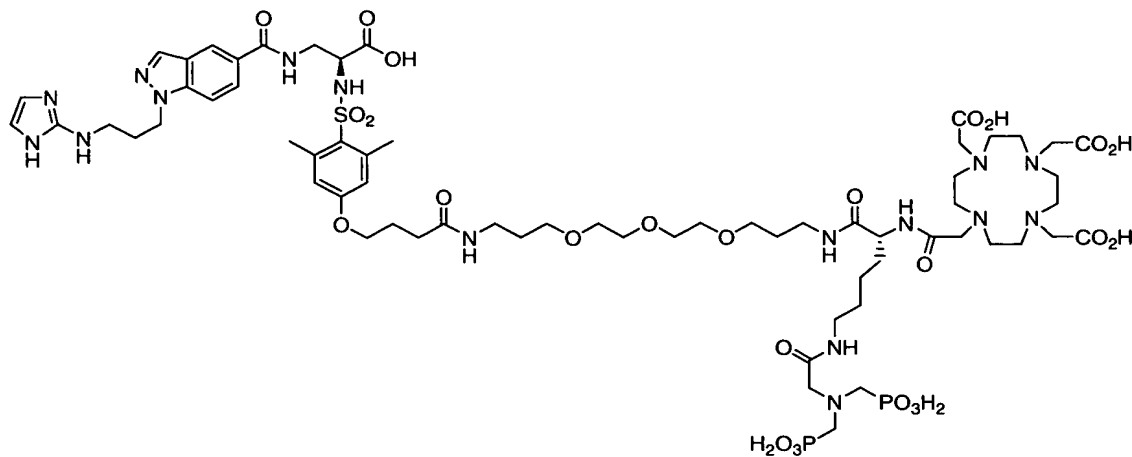




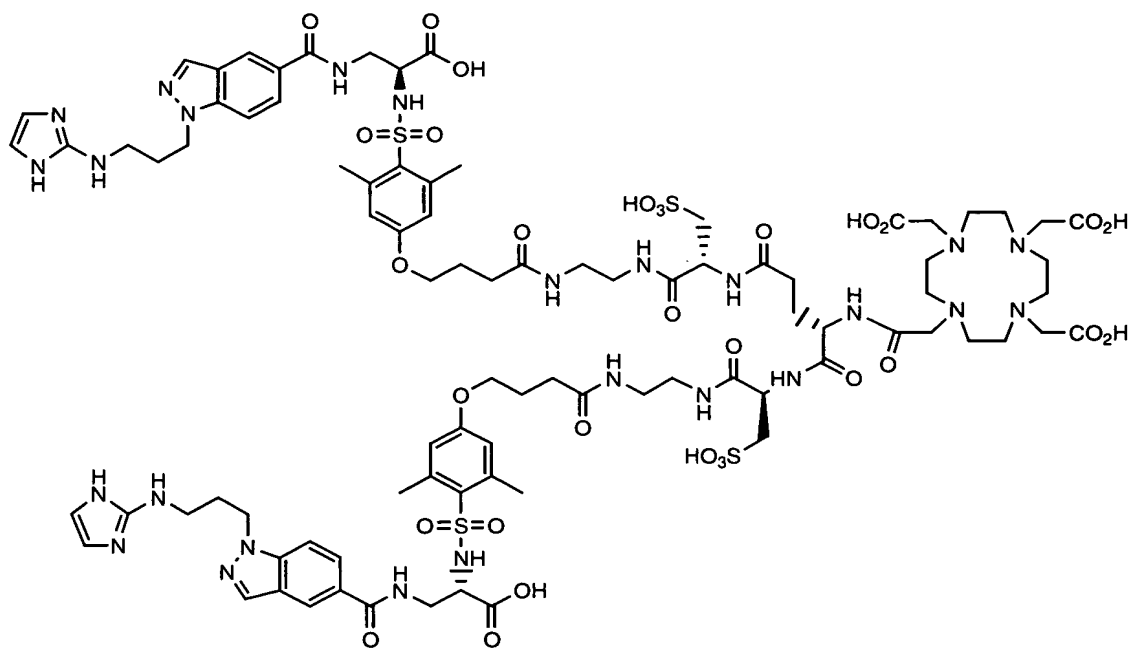
5

2-(((4-(3-(N-(3-(2-(2-(3-(2-(1,4,7,10-tetraaza-4,7,10-tris(carboxymethyl)cyclododecylacetyl)amino)-6-aminohexanoyl)amino)propoxy)ethoxy)ethoxy)propyl)-

carbamoyl)propoxy)-2,6-dimethylphenyl)sulfonyl)amino)-3-  
 ((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))-  
 carbonylamino)propionic acid salt;



2-({[4-(3-{N-[2-((2R)-3-Sulfo-2-{2-[1,4,7,10-tetraaza-4,7,10-  
 10 tris(carboxymethyl)cyclododecyl]acetyl amino}-  
 propyl)ethyl]carbamoyl}propoxy)-2,6-dimethylphenyl]-  
 sulfonyl)amino) (2S)-3-({1-[3-(imidazol-2-  
 yl amino)propyl] (1H-indazol-5-yl)}carbonylamino)propanoic  
 15 Acid;



2-[(4-[4-([2-((2R)-3-Sulfo-2-{2-[1,4,7,10-tetraaza-4,7,10-  
 5 tris(carboxymethyl)cyclododecyl]-  
 acetylamino}propyl)ethyl]amino)sulfonyl]phenyl]phenyl]-  
 sulfonyl)amino](2S)-3-([1-[3-(imidazol-2-  
 ylamino)propyl](1H-indazol-5-yl)]carbonylamino)propanoic  
 Acid;

10 (4S)-4-(N-{1-[N-(2-{4-[4-([[(1S)-1-carboxy-2-([1-[3-(2-  
 pyridylamino)propyl](1H-indazol-5-  
 yl)]carbonylamino)ethyl]amino)sulfonyl]-3,5-  
 dimethylphenoxy]butanoylamino)ethyl]carbamoyl]-3-  
 15 carboxypropyl}carbamoyl)-4-{2-[1,4,7,10-tetraaza-4,7,10-  
 tris(carboxymethyl)cyclododecyl]acetylamino}butanoic  
 acid;

(4S)-4-(N-{1-[N-(2-{4-[4-([[(1S)-1-carboxy-2-([1-[3-(imidazol-  
 2-ylamino)propyl](1H-indazol-5-  
 20 yl)]carbonylamino)ethyl]amino)sulfonyl]-3,5-  
 dimethylphenoxy]butanoylamino)ethyl]carbamoyl]-3-  
 carboxypropyl}carbamoyl)-4-{2-[1,4,7,10-tetraaza-4,7,10-



tris(carboxymethyl)cyclododecyl]acetyl amino}butanoic  
acid;

5 (4S)-4-{N-[ (1S)-1-(N-{1,3-bis[N-(2-{4-[4-({[(1S)-1-carboxy-2-  
(1-[3-(imidazol-2-ylamino)propyl] (1H-indazol-5-  
yl)}carbonylamino)ethyl]amino)sulfonyl)-3,5-  
dimethylphenoxy]butanoylamino)ethyl) carbamoyl]propyl}carb  
amoyl)-3-carboxypropyl]carbamoyl}-4-(6-{2-[1,4,7,10-  
tetraaza-4,7,10-  
10 tris(carboxymethyl)cyclododecyl]acetyl amino}  
hexanoylamino)butanoic acid;

15 (4S)-4-(N-{1-[N-(2-{4-[4-({[(1S)-1-carboxy-2-({1-[3-(3,4,5,6-  
tetrahydropyrimidin-2-ylamino)propyl] (1H-indazol-5-  
yl)}carbonylamino)ethyl]amino)sulfonyl)-3,5-  
dimethylphenoxy]butanoylamino)ethyl) carbamoyl]-3-carboxy  
propyl}carbamoyl)-4-{2-[1,4,7,10-tetraaza-4,7,10-tris  
(carboxymethyl)cyclododecyl]acetyl amino}butanoic acid;

20 (4S)-4-(N-{1-[N-(2-{4-[4-({[(1S)-1-carboxy-2-({1-methyl-3-[3-  
(2-3,4,5,6-tetrahydropyridylamino)propyl] (1H-indazol-6-  
yl)}carbonylamino)ethyl]amino)sulfonyl)-3,5-  
dimethylphenoxy]butanoylamino)ethyl) carbamoyl]-3-  
carboxypropyl}carbamoyl)-4-{2-[1,4,7,10-tetraaza-4,7,10-  
25 tris(carboxymethyl)cyclododecyl]acetyl amino}butanoic  
acid;

30 (4S)-4-(N-{ (1S)-1-[N-(2-{4-[4-({[(1S)-1-carboxy-2-({1-[2-(2-  
3,4,5,6-tetrahydropyridylamino)ethyl] (1H-indazol-5-  
yl)}carbonylamino)ethyl]amino)sulfonyl)-3,5-  
dimethylphenoxy]butanoylamino)ethyl) carbamoyl]-3-carboxy  
propyl}carbamoyl)-4-{2-[1,4,7,10-tetraaza-4,7,10-tris  
(carboxymethyl)cyclododecyl]acetyl amino}butanoic acid;

(2S)-2-{{(2,6-dimethyl-4-{3-[N-(2-{2-[1,4,7,10-tetraaza-  
4,7,10-tris(carboxymethyl)cyclododecyl]acetyl-  
amino}ethyl)carbamoyl]propoxy}phenyl)sulfonyl]amino}-3-  
({2-[2-(2-3,4,5,6-tetrahydropyridylamino)ethyl]}(2-hydro-  
5 1H-indazol-5-yl))carbonylamino)propanoic acid;

(4S)-4-{N-[(1S)-1-(N-{2-[(4-[4-[(1S)-1-carboxy-2-({1-[2-(2-  
3,4,5,6-tetrahydropyridylamino)ethyl]}(1H-indazol-5-  
yl))carbonylamino)ethyl]amino}sulfonyl]phenyl]  
10 phenyl)sulfonyl]amino}ethyl}carbamoyl)-3-carboxypropyl]  
carbamoyl}-4-{2-[1,4,7,10-tetraaza-4,7,10-tris(carboxy-  
methyl)cyclododecyl]acetylamino}butanoic acid;

(4S)-4-{N-[(1S)-1-(N-{2-[(4-[4-[(1S)-1-carboxy-2-({1-[3-  
15 (3,4,5,6-tetrahydropyrimidin-2-ylamino) propyl]}(1H-  
indazol-5-yl))carbonylamino)ethyl]amino}sulfonyl]  
phenyl]phenyl)sulfonyl]amino}ethyl}carbamoyl)-3-carboxy  
propyl]carbamoyl}-4-{2-[1,4,7,10-tetraaza-4,7,10-tris  
(carboxymethyl)cyclododecyl]acetylamino}butanoic acid;

(2S)-3-({3-[(imidazol-2-ylamino) methyl]-1-methyl(1H-indazol-  
6-yl))carbonylamino)-2-({4-[4-[(2-{2-[1,4,7,10-  
tetraaza-4,7,10-tris(carboxymethyl)  
cyclododecyl]acetylamino}ethyl)amino}sulfonyl]phenyl)phen  
25 yl)sulfonyl]amino)propanoic acid;

3-[(7-{3-[(6-[(1E)-1-aza-2-(2-sulfophenyl)vinyl]amino}(3-  
pyridyl))carbonylamino]propoxy}-1-[3-(imidazol-2-  
ylamino)propyl]}(1H-indazol-5-yl))-carbonylamino](2S)-2-  
30 {[2,4,6-trimethylphenyl)sulfonyl]-amino}propanoic acid;  
and

3-{{1-[3-(imidazol-2-ylamino)propyl]-7-(3-{2-[1,4,7,10-  
tetraaza-4,7,10-tris(carboxymethyl)cyclododecyl]-

acetylamino}propoxy) (1H-indazol-5-yl)]carbonylamino}-2-  
{[(2,4,6-trimethylphenyl)sulfonyl]amino}propanoic acid;

or a pharmaceutically acceptable salt form thereof.

5

80. (New) A kit according to Claim 58, wherein the kit  
further comprises one or more ancillary ligands and a reducing  
agent.

10

$\beta^3$  81. (New) A kit according to Claim 80, wherein the ancillary  
ligands are tricine and TPPTS.

15

82. (New) A kit according to Claim 80, wherein the reducing  
agent is tin(II).

20

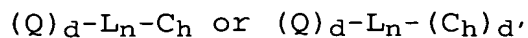
83. (New) A therapeutic radiopharmaceutical composition  
according to claim 65, wherein the therapeutic metal is  
selected from the group:  $^{33}\text{P}$ ,  $^{125}\text{I}$ ,  $^{186}\text{Re}$ ,  $^{188}\text{Re}$ ,  $^{153}\text{Sm}$ ,  $^{166}\text{Ho}$ ,  
 $^{177}\text{Lu}$ ,  $^{149}\text{Pm}$ ,  $^{90}\text{Y}$ ,  $^{212}\text{Bi}$ ,  $^{103}\text{Pd}$ ,  $^{109}\text{Pd}$ ,  $^{159}\text{Gd}$ ,  $^{140}\text{La}$ ,  $^{198}\text{Au}$ ,  $^{199}\text{Au}$ ,  
 $^{169}\text{Yb}$ ,  $^{175}\text{Yb}$ ,  $^{165}\text{Dy}$ ,  $^{166}\text{Dy}$ ,  $^{67}\text{Cu}$ ,  $^{105}\text{Rh}$ ,  $^{111}\text{Ag}$ , and  $^{192}\text{Ir}$ ; and  
the linking group is present between the non-peptide targeting  
moiety and chelator.

25

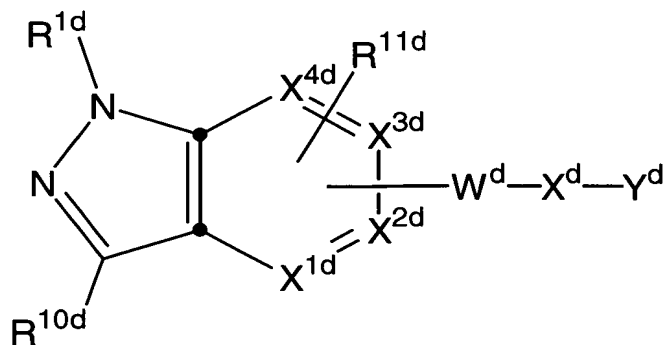
84. (New) A therapeutic radiopharmaceutical composition  
according to Claim 83, wherein the receptor is  $\alpha_v\beta_3$  or  $\alpha_v\beta_5$ .

30

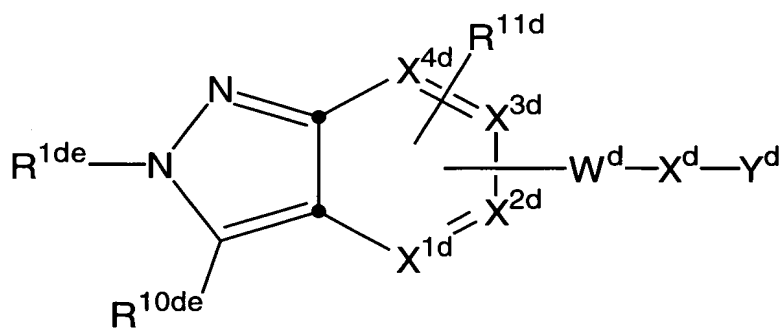
85. (New) A therapeutic radiopharmaceutical composition  
according to claim 65, wherein:  
the therapeutic metal is selected from the group  $^{33}\text{P}$ ,  $^{125}\text{I}$ ,  
 $^{186}\text{Re}$ ,  $^{188}\text{Re}$ ,  $^{153}\text{Sm}$ ,  $^{166}\text{Ho}$ ,  $^{177}\text{Lu}$ ,  $^{149}\text{Pm}$ ,  $^{90}\text{Y}$ ,  $^{212}\text{Bi}$ ,  $^{103}\text{Pd}$ ,  $^{109}\text{Pd}$ ,  
 $^{159}\text{Gd}$ ,  $^{140}\text{La}$ ,  $^{198}\text{Au}$ ,  $^{199}\text{Au}$ ,  $^{169}\text{Yb}$ ,  $^{175}\text{Yb}$ ,  $^{165}\text{Dy}$ ,  $^{166}\text{Dy}$ ,  $^{67}\text{Cu}$ ,  
 $^{105}\text{Rh}$ ,  $^{111}\text{Ag}$ , and  $^{192}\text{Ir}$ ; and  
the compound is of the formula:



wherein, Q is independently a compound of Formula (Ia) or  
 5 (Ib):



(Ia)



(Ib)

including stereoisomeric forms thereof, or mixtures of  
 15 stereoisomeric forms thereof, or pharmaceutically  
 acceptable salt or prodrug forms thereof wherein:

$X^{1d}$  is N, CH, C-  $W^d-X^d-Y^d$ , or C- $L_n$ ;

$X^{2d}$  is N, CH, or C-  $W^d-X^d-Y^d$ ;

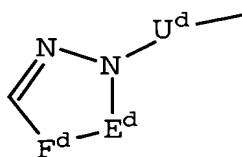
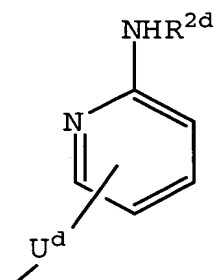
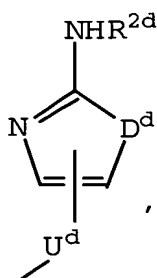
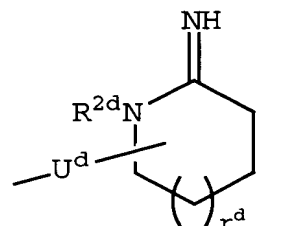
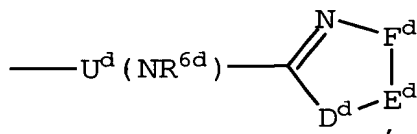
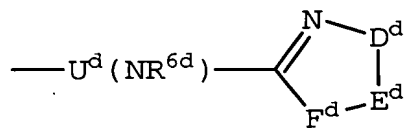
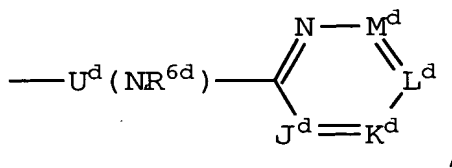
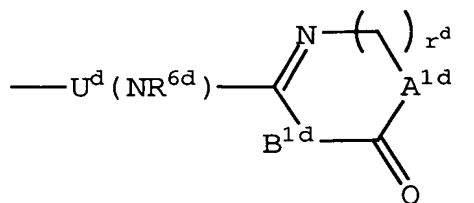
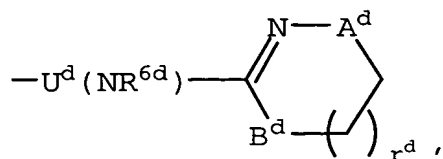
20  $X^{3d}$  is N,  $CR^{11d}$ , or C-  $W^d-X^d-Y^d$ ;

$X^{4d}$  is N or  $CR^{11d}$ ;

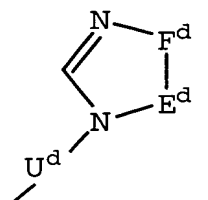
provided that when  $R^{1d}$  is  $R^{1de}$  then one of  $X^{1d}$  and  $X^{2d}$  is C-  $W^d$ -  
 $X^d$ -  $Y^d$ , and when  $R^{10d}$  is  $R^{1de}$  then  $X^{3d}$  is C-  $W^d$ -  $X^d$ -  $Y^d$ ;

$R^{1d}$  is selected from:  $R^{1de}$ ,  $C_1$ - $C_6$  alkyl substituted with 0-1  
 5  $R^{15d}$  or 0-1  $R^{21d}$ ,  $C_3$ - $C_6$  alkenyl substituted with 0-1  $R^{15d}$   
 or 0-1  $R^{21d}$ ,  $C_3$ - $C_7$  cycloalkyl substituted with 0-1  $R^{15d}$  or  
 0-1  $R^{21d}$ ,  $C_4$ - $C_{11}$  cycloalkylalkyl substituted with 0-1  $R^{15d}$   
 or 0-1  $R^{21d}$ , aryl substituted with 0-1  $R^{15d}$  or 0-2  $R^{11d}$  or  
 0-1  $R^{21d}$ , and aryl( $C_1$ - $C_6$  alkyl)- substituted with 0-1  $R^{15d}$   
 10 or 0-2  $R^{11d}$  or 0-1  $R^{21d}$ ;

$R^{1de}$  is selected from:



or



5

A<sup>d</sup> and B<sup>d</sup> are independently -CH<sub>2</sub>-, -O-, -N(R<sup>2d</sup>)-, or -C(=O)-;

A<sup>1d</sup> and B<sup>1d</sup> are independently -CH<sub>2</sub>- or -N(R<sup>3d</sup>)-;

D<sup>d</sup> is -N(R<sup>2d</sup>)-, -O-, -S-, -C(=O)- or -SO<sub>2</sub>-;

5

E<sup>d</sup>-F<sup>d</sup> is -C(R<sup>4d</sup>)=C(R<sup>5d</sup>)-, -N=C(R<sup>4d</sup>)-, -C(R<sup>4d</sup>)=N-, or  
-C(R<sup>4d</sup>)<sub>2</sub>C(R<sup>5d</sup>)<sub>2</sub>-;

J<sup>d</sup>, K<sup>d</sup>, L<sup>d</sup> and M<sup>d</sup> are independently selected from

10 -C(R<sup>4d</sup>)-, -C(R<sup>5d</sup>)- and -N-, provided that at least one of  
J<sup>d</sup>, K<sup>d</sup>, L<sup>d</sup> and M<sup>d</sup> is not -N-;

R<sup>2d</sup> is selected from: H, C<sub>1</sub>-C<sub>6</sub> alkyl, (C<sub>1</sub>-C<sub>6</sub> alkyl)carbonyl,  
(C<sub>1</sub>-C<sub>6</sub> alkoxy)carbonyl; (C<sub>1</sub>-C<sub>6</sub> alkyl)aminocarbonyl, C<sub>3</sub>-C<sub>6</sub>  
15 alkenyl, C<sub>3</sub>-C<sub>7</sub> cycloalkyl, C<sub>4</sub>-C<sub>11</sub> cycloalkylalkyl, aryl,  
heteroaryl(C<sub>1</sub>-C<sub>6</sub> alkyl)carbonyl, heteroarylcabonyl,  
aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-, (C<sub>1</sub>-C<sub>6</sub> alkyl)carbonyl-, arylcarbonyl,  
C<sub>1</sub>-C<sub>6</sub> alkylsulfonyl, arylsulfonyl, aryl(C<sub>1</sub>-C<sub>6</sub>  
alkyl)sulfonyl, heteroarylsulfonyl, heteroaryl(C<sub>1</sub>-C<sub>6</sub>  
20 alkyl)sulfonyl, aryloxy carbonyl, and aryl(C<sub>1</sub>-C<sub>6</sub>  
alkoxy)carbonyl, wherein said aryl groups are substituted  
with 0-2 substituents selected from the group: C<sub>1</sub>-C<sub>4</sub>  
alkyl, C<sub>1</sub>-C<sub>4</sub> alkoxy, halo, CF<sub>3</sub>, and nitro;

25 R<sup>3d</sup> is selected from: H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>7</sub> cycloalkyl, C<sub>4</sub>-C<sub>11</sub>  
cycloalkylalkyl, aryl, aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-, and  
heteroaryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-;

R<sup>4d</sup> and R<sup>5d</sup> are independently selected from: H, C<sub>1</sub>-C<sub>4</sub> alkoxy,  
30 NR<sup>2d</sup>R<sup>3d</sup>, halogen, NO<sub>2</sub>, CN, CF<sub>3</sub>, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>6</sub> alkenyl,  
C<sub>3</sub>-C<sub>7</sub> cycloalkyl, C<sub>4</sub>-C<sub>11</sub> cycloalkylalkyl, aryl, aryl(C<sub>1</sub>-C<sub>6</sub>

alkyl)-, (C<sub>1</sub>-C<sub>6</sub> alkyl)carbonyl, (C<sub>1</sub>-C<sub>6</sub> alkoxy)carbonyl,  
and arylcarbonyl, or

alternatively, when substituents on adjacent atoms, R<sup>4d</sup> and R<sup>5d</sup>  
5 can be taken together with the carbon atoms to which they  
are attached to form a 5-7 membered carbocyclic or 5-7  
membered heterocyclic aromatic or non-aromatic ring  
system, said carbocyclic or heterocyclic ring being  
optionally substituted with 0-2 groups selected from: C<sub>1</sub>-  
10 C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> alkoxy, halo, cyano, amino, CF<sub>3</sub>, and NO<sub>2</sub>;

U<sup>d</sup> is selected from:

- (CH<sub>2</sub>)<sub>n<sup>d</sup></sub>-,
- (CH<sub>2</sub>)<sub>n<sup>d</sup></sub>(CR<sup>7d</sup>=CR<sup>8d</sup>) (CH<sub>2</sub>)<sub>m<sup>d</sup></sub>-,
- 15 - (CH<sub>2</sub>)<sub>n<sup>d</sup></sub>(C≡C) (CH<sub>2</sub>)<sub>m<sup>d</sup></sub>-,
- (CH<sub>2</sub>)<sub>t<sup>d</sup></sub>Q (CH<sub>2</sub>)<sub>m<sup>d</sup></sub>-,
- (CH<sub>2</sub>)<sub>n<sup>d</sup></sub>O (CH<sub>2</sub>)<sub>m<sup>d</sup></sub>-,
- (CH<sub>2</sub>)<sub>n<sup>d</sup></sub>N(R<sup>6d</sup>) (CH<sub>2</sub>)<sub>m<sup>d</sup></sub>-,
- (CH<sub>2</sub>)<sub>n<sup>d</sup></sub>C(=O) (CH<sub>2</sub>)<sub>m<sup>d</sup></sub>-,
- 20 - (CH<sub>2</sub>)<sub>n<sup>d</sup></sub>(C=O)N(R<sup>6d</sup>) (CH<sub>2</sub>)<sub>m<sup>d</sup></sub>-,
- (CH<sub>2</sub>)<sub>n<sup>d</sup></sub>N(R<sup>6d</sup>) (C=O) (CH<sub>2</sub>)<sub>m<sup>d</sup></sub>-, and
- (CH<sub>2</sub>)<sub>n<sup>d</sup></sub>S(O)<sub>p<sup>d</sup></sub>(CH<sub>2</sub>)<sub>m<sup>d</sup></sub>;

wherein one or more of the methylene groups in U<sup>d</sup> is  
optionally substituted with R<sup>7d</sup>;

25 Q<sup>d</sup> is selected from 1,2-cycloalkylene, 1,2-phenylene, 1,3-  
phenylene, 1,4-phenylene, 2,3-pyridinylene, 3,4-  
pyridinylene, 2,4-pyridinylene, and 3,4-pyridazinylene;

30 R<sup>6d</sup> is selected from: H, C<sub>1</sub>-C<sub>4</sub> alkyl, and benzyl;



R<sup>7d</sup> and R<sup>8d</sup> are independently selected from: H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>7</sub> cycloalkyl, C<sub>4</sub>-C<sub>11</sub> cycloalkylalkyl, aryl, aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-, and heteroaryl(C<sub>0</sub>-C<sub>6</sub> alkyl)-;

5

R<sup>10d</sup> is selected from: H, R<sup>1de</sup>, C<sub>1</sub>-C<sub>4</sub> alkoxy substituted with 0-1 R<sup>21d</sup>, N(R<sup>6d</sup>)<sub>2</sub>, halogen, NO<sub>2</sub>, CN, CF<sub>3</sub>, CO<sub>2</sub>R<sup>17d</sup>, C(=O)R<sup>17d</sup>, CONR<sup>17d</sup>R<sup>20d</sup>, -SO<sub>2</sub>R<sup>17d</sup>, -SO<sub>2</sub>NR<sup>17d</sup>R<sup>20d</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl substituted with 0-1 R<sup>15d</sup> or 0-1 R<sup>21d</sup>, C<sub>3</sub>-C<sub>6</sub> alkenyl substituted with 0-1 R<sup>15d</sup> or 0-1 R<sup>21d</sup>, C<sub>3</sub>-C<sub>7</sub> cycloalkyl substituted with 0-1 R<sup>15d</sup> or 0-1 R<sup>21d</sup>, C<sub>4</sub>-C<sub>11</sub> cycloalkylalkyl substituted with 0-1 R<sup>15d</sup> or 0-1 R<sup>21d</sup>, aryl substituted with 0-1 R<sup>15d</sup> or 0-2 R<sup>11d</sup> or 0-1 R<sup>21d</sup>, and aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)- substituted with 0-1 R<sup>15d</sup> or 0-2 R<sup>11d</sup> or 0-1 R<sup>21d</sup>;

10

β<sup>3</sup>

15

R<sup>10de</sup> is selected from: H, C<sub>1</sub>-C<sub>4</sub> alkoxy substituted with 0-1 R<sup>21d</sup>, N(R<sup>6d</sup>)<sub>2</sub>, halogen, NO<sub>2</sub>, CN, CF<sub>3</sub>, CO<sub>2</sub>R<sup>17d</sup>, C(=O)R<sup>17d</sup>, CONR<sup>17d</sup>R<sup>20d</sup>, -SO<sub>2</sub>R<sup>17d</sup>, -SO<sub>2</sub>NR<sup>17d</sup>R<sup>20d</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl substituted with 0-1 R<sup>15d</sup> or 0-1 R<sup>21d</sup>, C<sub>3</sub>-C<sub>6</sub> alkenyl substituted with 0-1 R<sup>15d</sup> or 0-1 R<sup>21d</sup>, C<sub>3</sub>-C<sub>7</sub> cycloalkyl substituted with 0-1 R<sup>15d</sup> or 0-1 R<sup>21d</sup>, C<sub>4</sub>-C<sub>11</sub> cycloalkylalkyl substituted with 0-1 R<sup>15d</sup> or 0-1 R<sup>21d</sup>, aryl substituted with 0-1 R<sup>15d</sup> or 0-2 R<sup>11d</sup> or 0-1 R<sup>21d</sup>, and aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)- substituted with 0-1 R<sup>15d</sup> or 0-2 R<sup>11d</sup> or 0-1 R<sup>21d</sup>;

20

25

R<sup>11d</sup> is selected from H, halogen, CF<sub>3</sub>, CN, NO<sub>2</sub>, hydroxy, NR<sup>2d</sup>R<sup>3d</sup>, C<sub>1</sub>-C<sub>4</sub> alkyl substituted with 0-1 R<sup>21d</sup>, C<sub>1</sub>-C<sub>4</sub> alkoxy substituted with 0-1 R<sup>21d</sup>, aryl substituted with 0-1 R<sup>21d</sup>, aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)- substituted with 0-1 R<sup>21d</sup>,

30

(C<sub>1</sub>-C<sub>4</sub> alkoxy)carbonyl substituted with 0-1 R<sup>21d</sup>, (C<sub>1</sub>-C<sub>4</sub> alkyl)carbonyl substituted with 0-1 R<sup>21d</sup>, C<sub>1</sub>-C<sub>4</sub> alkylsulfonyl substituted with 0-1 R<sup>21d</sup>, and C<sub>1</sub>-C<sub>4</sub> alkylaminosulfonyl substituted with 0-1 R<sup>21d</sup>;

5

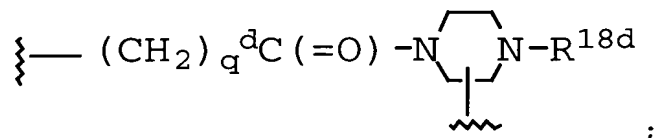
W<sup>d</sup> is selected from:

-(C(R<sup>12d</sup>)<sub>2</sub>)<sub>q</sub><sup>d</sup>C(=O)N(R<sup>13d</sup>)-, and

-C(=O)-N(R<sup>13d</sup>)-(C(R<sup>12d</sup>)<sub>2</sub>)<sub>q</sub><sup>d</sup>-;

10 X<sup>d</sup> is -C(R<sup>12d</sup>)(R<sup>14d</sup>)-C(R<sup>12d</sup>)(R<sup>15d</sup>)-; or

alternatively, W<sup>d</sup> and X<sup>d</sup> can be taken together to be



15 R<sup>12d</sup> is selected from H, halogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl, C<sub>2</sub>-C<sub>6</sub> alkynyl, C<sub>3</sub>-C<sub>7</sub> cycloalkyl, C<sub>4</sub>-C<sub>10</sub> cycloalkylalkyl, (C<sub>1</sub>-C<sub>4</sub> alkyl)carbonyl, aryl, and aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-;

R<sup>13d</sup> is selected from H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>7</sub> cycloalkylmethyl,  
20 and aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-;

R<sup>14d</sup> is selected from:

H, C<sub>1</sub>-C<sub>6</sub> alkylthio(C<sub>1</sub>-C<sub>6</sub> alkyl)-, aryl(C<sub>1</sub>-C<sub>10</sub> alkylthioalkyl)-, aryl(C<sub>1</sub>-C<sub>10</sub> alkoxyalkyl)-, C<sub>1</sub>-C<sub>10</sub> alkyl,  
25 C<sub>1</sub>-C<sub>10</sub> alkoxyalkyl, C<sub>1</sub>-C<sub>6</sub> hydroxyalkyl, C<sub>2</sub>-C<sub>10</sub> alkenyl, C<sub>2</sub>-C<sub>10</sub> alkynyl, C<sub>3</sub>-C<sub>10</sub> cycloalkyl, C<sub>3</sub>-C<sub>10</sub> cycloalkylalkyl, aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-, heteroaryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-, aryl, heteroaryl, CO<sub>2</sub>R<sup>17d</sup>, C(=O)R<sup>17d</sup>, and CONR<sup>17d</sup>R<sup>20d</sup>, provided that any of the above alkyl, cycloalkyl, aryl or

heteroaryl groups may be unsubstituted or substituted independently with 0-1  $R^{16d}$  or 0-2  $R^{11d}$ ;

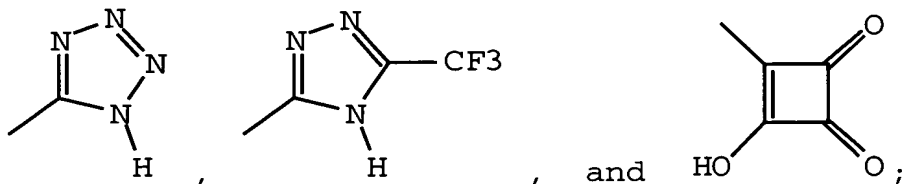
$R^{15d}$  is selected from:

- 5 H,  $R^{16d}$ ,  $C_1-C_{10}$  alkyl,  $C_1-C_{10}$  alkoxyalkyl,  $C_1-C_{10}$  alkylaminoalkyl,  $C_1-C_{10}$  dialkylaminoalkyl, ( $C_1-C_{10}$  alkyl)carbonyl, aryl( $C_1-C_6$  alkyl)carbonyl,  $C_1-C_{10}$  alkenyl,  $C_1-C_{10}$  alkynyl,  $C_3-C_{10}$  cycloalkyl,  $C_3-C_{10}$  cycloalkylalkyl, aryl( $C_1-C_6$  alkyl)-, heteroaryl( $C_1-C_6$  alkyl)-, aryl,
- 10 heteroaryl,  $CO_2R^{17d}$ ,  $C(=O)R^{17d}$ ,  $CONR^{17d}R^{20d}$ ,  $SO_2R^{17d}$ , and  $SO_2NR^{17d}R^{20d}$ , provided that any of the above alkyl, cycloalkyl, aryl or heteroaryl groups may be unsubstituted or substituted independently with 0-2  $R^{11d}$ ;

- 15  $Y^d$  is selected from:

$-COR^{19d}$ ,  $-SO_3H$ ,  $-PO_3H$ , tetrazolyl,  $-CONHNHSO_2CF_3$ ,  $-CONHSO_2R^{17d}$ ,  $-CONHSO_2NHR^{17d}$ ,  $-NHCOCF_3$ ,  $-NHCONHSO_2R^{17d}$ ,  $-NHSO_2R^{17d}$ ,  $-OPO_3H_2$ ,  $-OSO_3H$ ,  $-PO_3H_2$ ,  $-SO_3H$ ,  $-SO_2NHCOR^{17d}$ ,  $-SO_2NHCO_2R^{17d}$ ,

20



$R^{16d}$  is selected from:

- $-N(R^{20d})-C(=O)-O-R^{17d}$ ,
- 25  $-N(R^{20d})-C(=O)-R^{17d}$ ,
- $-N(R^{20d})-C(=O)-NH-R^{17d}$ ,
- $-N(R^{20d})SO_2-R^{17d}$ , and
- $-N(R^{20d})SO_2-NR^{20d}R^{17d}$ ;

R<sup>17d</sup> is selected from:

C<sub>1</sub>-C<sub>10</sub> alkyl optionally substituted with a bond to L<sub>n</sub>, C<sub>3</sub>-  
 C<sub>11</sub> cycloalkyl optionally substituted with a bond to L<sub>n</sub>,  
 aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)- optionally substituted with a bond to  
 5 L<sub>n</sub>, (C<sub>1</sub>-C<sub>6</sub> alkyl)aryl optionally substituted with a bond  
 to L<sub>n</sub>, heteroaryl(C<sub>1</sub>-C<sub>6</sub> alkyl)- optionally substituted  
 with a bond to L<sub>n</sub>, (C<sub>1</sub>-C<sub>6</sub> alkyl)heteroaryl optionally  
 substituted with a bond to L<sub>n</sub>, biaryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-  
 optionally substituted with a bond to L<sub>n</sub>, heteroaryl  
 10 optionally substituted with a bond to L<sub>n</sub>, aryl optionally  
 substituted with a bond to L<sub>n</sub>, biaryl optionally  
 substituted with a bond to L<sub>n</sub>, and a bond to L<sub>n</sub>, wherein  
 said aryl, biaryl or heteroaryl groups are also  
 optionally substituted with 0-3 substituents selected  
 15 from the group consisting of: C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> alkoxy,  
 aryl, heteroaryl, halo, cyano, amino, CF<sub>3</sub>, and NO<sub>2</sub>;

R<sup>18d</sup> is selected from:

-H,  
 20 -C(=O)-O-R<sup>17d</sup>,  
 -C(=O)-R<sup>17d</sup>,  
 -C(=O)-NH-R<sup>17d</sup>,  
 -SO<sub>2</sub>-R<sup>17d</sup>, and  
 -SO<sub>2</sub>-NR<sup>20d</sup>R<sup>17d</sup>;

25

R<sup>19d</sup> is selected from: hydroxy, C<sub>1</sub>-C<sub>10</sub> alkyloxy,  
 C<sub>3</sub>-C<sub>11</sub> cycloalkyloxy, aryloxy, aryl(C<sub>1</sub>-C<sub>6</sub> alkoxy)-, C<sub>3</sub>-C<sub>10</sub>  
 alkylcarbonyloxyalkyloxy, C<sub>3</sub>-C<sub>10</sub>  
 alkoxy carbonyloxyalkyloxy, C<sub>2</sub>-C<sub>10</sub> alkoxy carbonylalkyloxy,  
 30 C<sub>5</sub>-C<sub>10</sub> cycloalkylcarbonyloxyalkyloxy,  
 C<sub>5</sub>-C<sub>10</sub> cycloalkoxy carbonyloxyalkyloxy,  
 C<sub>5</sub>-C<sub>10</sub> cycloalkoxy carbonylalkyloxy,

C<sub>7</sub>-C<sub>11</sub> aryloxy-carbonylalkyloxy,  
 C<sub>8</sub>-C<sub>12</sub> aryloxy-carbonyloxyalkyloxy,  
 C<sub>8</sub>-C<sub>12</sub> aryl-carbonyloxyalkyloxy,  
 C<sub>5</sub>-C<sub>10</sub> alkoxyalkyl-carbonyloxyalkyloxy, C<sub>5</sub>-C<sub>10</sub> (5-alkyl-  
 5 1,3-dioxa-cyclopenten-2-one-yl)methyloxy, C<sub>10</sub>-C<sub>14</sub> (5-aryl-  
 1,3-dioxa-cyclopenten-2-one-yl)methyloxy, and  
 (R<sup>11d</sup>) (R<sup>12d</sup>)N-(C<sub>1</sub>-C<sub>10</sub> alkoxy)-;

10 R<sup>20d</sup> is selected from: H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>7</sub> cycloalkyl, C<sub>4</sub>-C<sub>11</sub>  
 cycloalkylalkyl, aryl, aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-, and  
 heteroaryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-;

R<sup>21d</sup> is selected from: COOH and NR<sup>6d</sup><sub>2</sub>;

m<sup>d</sup> is 0-4;

15 n<sup>d</sup> is 0-4;

t<sup>d</sup> is 0-4;

p<sup>d</sup> is 0-2;

q<sup>d</sup> is 0-2; and

r<sup>d</sup> is 0-2;

20

with the following provisos:

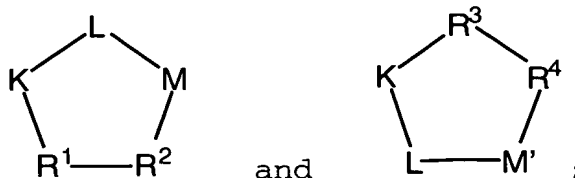
(1) t<sup>d</sup>, n<sup>d</sup>, m<sup>d</sup> and q<sup>d</sup> are chosen such that the number of atoms  
 connecting R<sup>1d</sup> and Y<sup>d</sup> is in the range of 10-14; and

(2) n<sup>d</sup> and m<sup>d</sup> are chosen such that the value of n<sup>d</sup> plus m<sup>d</sup> is

25 greater than one unless U<sup>d</sup> is

-(CH<sub>2</sub>)<sub>t</sub> Q<sup>d</sup> (CH<sub>2</sub>)<sub>m</sub> -;

or Q is a peptide selected from the group:



R<sup>1</sup> is L-valine, D-valine or L-lysine optionally substituted on the ε amino group with a bond to L<sub>n</sub>;

5

R<sup>2</sup> is L-phenylalanine, D-phenylalanine, D-1-naphthylalanine, 2-aminothiazole-4-acetic acid or tyrosine, the tyrosine optionally substituted on the hydroxy group with a bond to L<sub>n</sub>;

10

R<sup>3</sup> is D-valine;

R<sup>4</sup> is D-tyrosine substituted on the hydroxy group with a bond to L<sub>n</sub>;

15

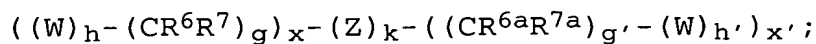
provided that one of R<sup>1</sup> and R<sup>2</sup> in each Q is substituted with a bond to L<sub>n</sub>, and further provided that when R<sup>2</sup> is 2-aminothiazole-4-acetic acid, K is N-methylarginine;

20 provided that at least one Q is a compound of Formula (Ia) or (Ib);

d is selected from 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;

25 d' is 1-100;

L<sub>n</sub> is a linking group having the formula:



W is independently selected at each occurrence from the group:

O, S, NH, NHC(=O), C(=O)NH, NR<sup>8</sup>C(=O), C(=O)N R<sup>8</sup>, C(=O),  
 C(=O)O, OC(=O), NHC(=S)NH, NHC(=O)NH, SO<sub>2</sub>, SO<sub>2</sub>NH,  
 (OCH<sub>2</sub>CH<sub>2</sub>)<sub>s</sub>, (CH<sub>2</sub>CH<sub>2</sub>O)<sub>s'</sub>, (OCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>)<sub>s''</sub>, (CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>O)<sub>t</sub>, and  
 5 (aa)<sub>t'</sub>;

aa is independently at each occurrence an amino acid;

10 Z is selected from the group: aryl substituted with 0-3 R<sup>10</sup>,  
 C<sub>3-10</sub> cycloalkyl substituted with 0-3 R<sup>10</sup>, and a 5-10  
 membered heterocyclic ring system containing 1-4  
 heteroatoms independently selected from N, S, and O and  
 substituted with 0-3 R<sup>10</sup>;

15 R<sup>6</sup>, R<sup>6a</sup>, R<sup>7</sup>, R<sup>7a</sup>, and R<sup>8</sup> are independently selected at each  
 occurrence from the group: H, =O, COOH, SO<sub>3</sub>H, PO<sub>3</sub>H, C<sub>1</sub>-C<sub>5</sub>  
 alkyl substituted with 0-3 R<sup>10</sup>, aryl substituted with 0-3  
 R<sup>10</sup>, benzyl substituted with 0-3 R<sup>10</sup>, and C<sub>1</sub>-C<sub>5</sub> alkoxy  
 substituted with 0-3 R<sup>10</sup>, NHC(=O)R<sup>11</sup>, C(=O)NHR<sup>11</sup>,  
 20 NHC(=O)NHR<sup>11</sup>, NHR<sup>11</sup>, R<sup>11</sup>, and a bond to C<sub>H</sub>;

R<sup>10</sup> is independently selected at each occurrence from the  
 group: a bond to C<sub>H</sub>, COOR<sup>11</sup>, C(=O)NHR<sup>11</sup>, NHC(=O)R<sup>11</sup>, OH,  
 NHR<sup>11</sup>, SO<sub>3</sub>H, PO<sub>3</sub>H, -OPO<sub>3</sub>H<sub>2</sub>, -OSO<sub>3</sub>H, aryl substituted with  
 25 0-3 R<sup>11</sup>, C<sub>1-5</sub> alkyl substituted with 0-1 R<sup>12</sup>, C<sub>1-5</sub> alkoxy  
 substituted with 0-1 R<sup>12</sup>, and a 5-10 membered  
 heterocyclic ring system containing 1-4 heteroatoms  
 independently selected from N, S, and O and substituted  
 with 0-3 R<sup>11</sup>;

30

R<sup>11</sup> is independently selected at each occurrence from the  
 group: H, alkyl substituted with 0-1 R<sup>12</sup>, aryl

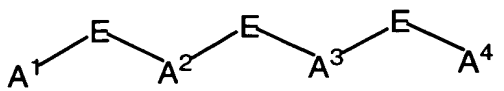
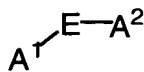
substituted with 0-1  $R^{12}$ , a 5-10 membered heterocyclic  
 ring system containing 1-4 heteroatoms independently  
 selected from N, S, and O and substituted with 0-1  $R^{12}$ ,  
 C<sub>3-10</sub> cycloalkyl substituted with 0-1  $R^{12}$ , polyalkylene  
 glycol substituted with 0-1  $R^{12}$ , carbohydrate substituted  
 with 0-1  $R^{12}$ , cyclodextrin substituted with 0-1  $R^{12}$ , amino  
 acid substituted with 0-1  $R^{12}$ , polycarboxyalkyl  
 substituted with 0-1  $R^{12}$ , polyazaalkyl substituted with  
 0-1  $R^{12}$ , and peptide substituted with 0-1  $R^{12}$ , wherein the  
 peptide is comprised of 2-10 amino acids, 3,6-O-disulfo-  
 B-D-galactopyranosyl, bis(phosphonomethyl)glycine, and a  
 bond to C<sub>h</sub>;

$R^{12}$  is a bond to C<sub>h</sub>;

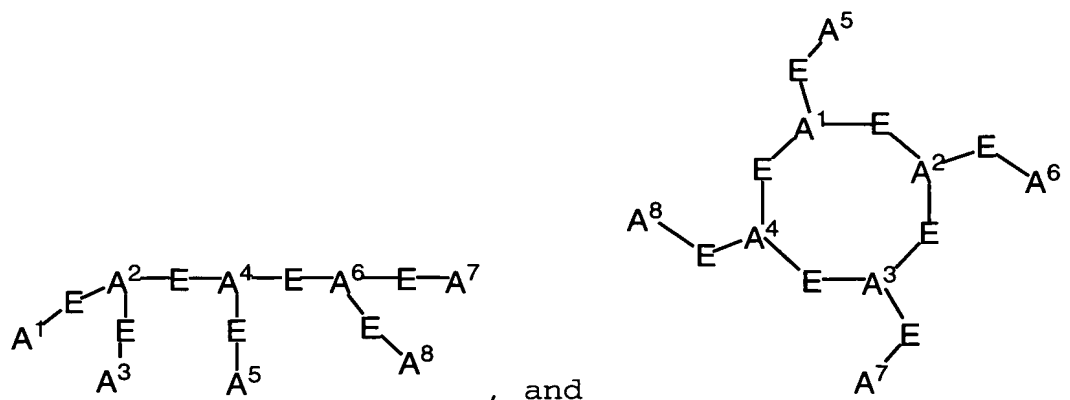
15

k is selected from 0, 1, and 2;  
 h is selected from 0, 1, and 2;  
 h' is selected from 0, 1, and 2;  
 g is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;  
 g' is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;  
 s is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;  
 s' is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;  
 s'' is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;  
 t is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;  
 t' is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;  
 x is selected from 0, 1, 2, 3, 4, and 5;  
 x' is selected from 0, 1, 2, 3, 4, and 5;

C<sub>h</sub> is a metal bonding unit having a formula selected from the  
 group:







5  $A^1, A^2, A^3, A^4, A^5, A^6, A^7,$  and  $A^8$  are independently selected at each occurrence from the group:  $NR^{13}, NR^{13}R^{14}, S, SH, S(Pg), O, OH, PR^{13}, PR^{13}R^{14}, P(O)R^{15}R^{16},$  and a bond to  $L_n$ ;

10 E is a bond, CH, or a spacer group independently selected at each occurrence from the group:  $C_1-C_{10}$  alkyl substituted with 0-3  $R^{17},$  aryl substituted with 0-3  $R^{17}, C_{3-10}$  cycloalkyl substituted with 0-3  $R^{17},$  heterocyclo- $C_{1-10}$  alkyl substituted with 0-3  $R^{17},$  wherein the heterocyclo group is a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O,  $C_{6-10}$  aryl- $C_{1-10}$  alkyl substituted with 0-3  $R^{17},$   $C_{1-10}$  alkyl- $C_{6-10}$  aryl- substituted with 0-3  $R^{17},$  and a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O and substituted with 0-3  $R^{17};$

20

$R^{13}$  and  $R^{14}$  are each independently selected from the group: a bond to  $L_n,$  hydrogen,  $C_1-C_{10}$  alkyl substituted with 0-3  $R^{17},$  aryl substituted with 0-3  $R^{17}, C_{1-10}$  cycloalkyl substituted with 0-3  $R^{17},$  heterocyclo- $C_{1-10}$  alkyl substituted with 0-3  $R^{17},$  wherein the heterocyclo group

25

is a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O, C<sub>6-10</sub> aryl-C<sub>1-10</sub> alkyl substituted with 0-3 R<sup>17</sup>, C<sub>1-10</sub> alkyl-C<sub>6-10</sub> aryl- substituted with 0-3 R<sup>17</sup>, a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O and substituted with 0-3 R<sup>17</sup>, and an electron, provided that when one of R<sup>13</sup> or R<sup>14</sup> is an electron, then the other is also an electron;

10

alternatively, R<sup>13</sup> and R<sup>14</sup> combine to form =C(R<sup>20</sup>)(R<sup>21</sup>);

R<sup>15</sup> and R<sup>16</sup> are each independently selected from the group: a bond to L<sub>n</sub>, -OH, C<sub>1-10</sub> alkyl substituted with 0-3 R<sup>17</sup>, C<sub>1-10</sub> alkyl substituted with 0-3 R<sup>17</sup>, aryl substituted with 0-3 R<sup>17</sup>, C<sub>3-10</sub> cycloalkyl substituted with 0-3 R<sup>17</sup>, heterocyclo-C<sub>1-10</sub> alkyl substituted with 0-3 R<sup>17</sup>, wherein the heterocyclo group is a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O, C<sub>6-10</sub> aryl-C<sub>1-10</sub> alkyl substituted with 0-3 R<sup>17</sup>, C<sub>1-10</sub> alkyl-C<sub>6-10</sub> aryl- substituted with 0-3 R<sup>17</sup>, and a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O and substituted with 0-3 R<sup>17</sup>;

R<sup>17</sup> is independently selected at each occurrence from the group: a bond to L<sub>n</sub>, =O, F, Cl, Br, I, -CF<sub>3</sub>, -CN, -CO<sub>2</sub>R<sup>18</sup>, -C(=O)R<sup>18</sup>, -C(=O)N(R<sup>18</sup>)<sub>2</sub>, -CHO, -CH<sub>2</sub>OR<sup>18</sup>, -OC(=O)R<sup>18</sup>, -OC(=O)OR<sup>18a</sup>, -OR<sup>18</sup>, -OC(=O)N(R<sup>18</sup>)<sub>2</sub>, -NR<sup>19</sup>C(=O)R<sup>18</sup>, -NR<sup>19</sup>C(=O)OR<sup>18a</sup>, -NR<sup>19</sup>C(=O)N(R<sup>18</sup>)<sub>2</sub>,

$\beta^3$ 
  
 -NR<sup>19</sup>SO<sub>2</sub>N(R<sup>18</sup>)<sub>2</sub>, -NR<sup>19</sup>SO<sub>2</sub>R<sup>18a</sup>, -SO<sub>3</sub>H, -SO<sub>2</sub>R<sup>18a</sup>, -SR<sup>18</sup>,  
 -S(=O)R<sup>18a</sup>, -SO<sub>2</sub>N(R<sup>18</sup>)<sub>2</sub>, -N(R<sup>18</sup>)<sub>2</sub>, -NHC(=S)NHR<sup>18</sup>, =NOR<sup>18</sup>,  
 NO<sub>2</sub>, -C(=O)NHOR<sup>18</sup>, -C(=O)NHN(R<sup>18</sup>)R<sup>18a</sup>, -OCH<sub>2</sub>CO<sub>2</sub>H,  
 2-(1-morpholino)ethoxy, C<sub>1</sub>-C<sub>5</sub> alkyl, C<sub>2</sub>-C<sub>4</sub> alkenyl, C<sub>3</sub>-C<sub>6</sub>  
 5 cycloalkyl, C<sub>3</sub>-C<sub>6</sub> cycloalkylmethyl, C<sub>2</sub>-C<sub>6</sub> alkoxyalkyl,  
 aryl substituted with 0-2 R<sup>18</sup>, and a 5-10 membered  
 heterocyclic ring system containing 1-4 heteroatoms  
 independently selected from N, S, and O;

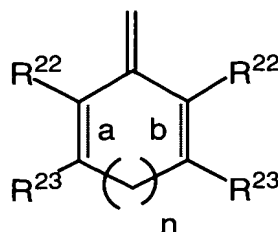
10 R<sup>18</sup>, R<sup>18a</sup>, and R<sup>19</sup> are independently selected at each  
 occurrence from the group: a bond to L<sub>n</sub>, H, C<sub>1</sub>-C<sub>6</sub> alkyl,  
 phenyl, benzyl, C<sub>1</sub>-C<sub>6</sub> alkoxy, halide, nitro, cyano, and  
 trifluoromethyl;

15 Pg is a thiol protecting group;

R<sup>20</sup> and R<sup>21</sup> are independently selected from the group: H,  
 C<sub>1</sub>-C<sub>10</sub> alkyl, -CN, -CO<sub>2</sub>R<sup>25</sup>, -C(=O)R<sup>25</sup>, -C(=O)N(R<sup>25</sup>)<sub>2</sub>,  
 C<sub>2</sub>-C<sub>10</sub> 1-alkene substituted with 0-3 R<sup>23</sup>, C<sub>2</sub>-C<sub>10</sub> 1-alkyne  
 20 substituted with 0-3 R<sup>23</sup>, aryl substituted with 0-3 R<sup>23</sup>,  
 unsaturated 5-10 membered heterocyclic ring system  
 containing 1-4 heteroatoms independently selected from N,  
 S, and O and substituted with 0-3 R<sup>23</sup>, and unsaturated  
 C<sub>3</sub>-C<sub>10</sub> carbocycle substituted with 0-3 R<sup>23</sup>;

25

alternatively, R<sup>20</sup> and R<sup>21</sup>, taken together with the divalent  
 carbon radical to which they are attached form:



$R^{22}$  and  $R^{23}$  are independently selected from the group: H,  $R^{24}$ , C<sub>1</sub>-C<sub>10</sub> alkyl substituted with 0-3  $R^{24}$ , C<sub>2</sub>-C<sub>10</sub> alkenyl substituted with 0-3  $R^{24}$ , C<sub>2</sub>-C<sub>10</sub> alkynyl substituted with 0-3  $R^{24}$ , aryl substituted with 0-3  $R^{24}$ , a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O and substituted with 0-3  $R^{24}$ , and C<sub>3</sub>-<sub>10</sub> carbocycle substituted with 0-3  $R^{24}$ ;

alternatively,  $R^{22}$ ,  $R^{23}$  taken together form a fused aromatic or a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O;

**a** and **b** indicate the positions of optional double bonds and **n** is 0 or 1;

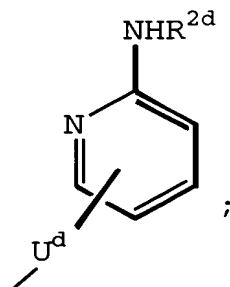
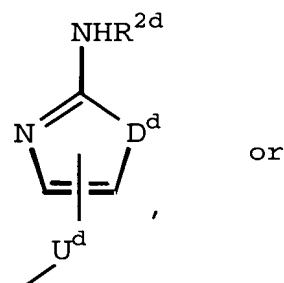
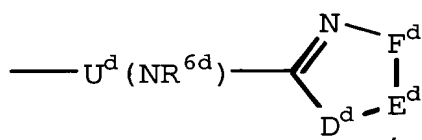
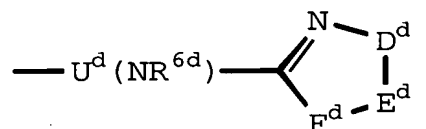
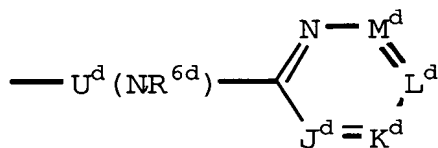
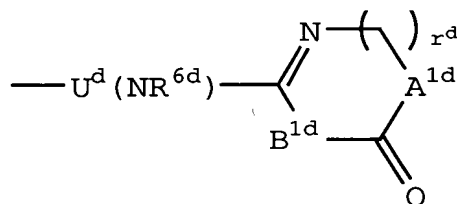
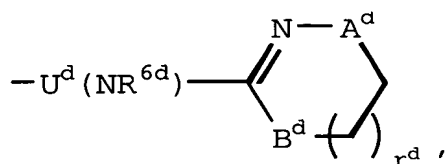
$R^{24}$  is independently selected at each occurrence from the

group: =O, F, Cl, Br, I, -CF<sub>3</sub>, -CN, -CO<sub>2</sub>R<sup>25</sup>, -C(=O)R<sup>25</sup>, -C(=O)N(R<sup>25</sup>)<sub>2</sub>, -N(R<sup>25</sup>)<sub>3</sub><sup>+</sup>, -CH<sub>2</sub>OR<sup>25</sup>, -OC(=O)R<sup>25</sup>, -OC(=O)OR<sup>25a</sup>, -OR<sup>25</sup>, -OC(=O)N(R<sup>25</sup>)<sub>2</sub>, -NR<sup>26</sup>C(=O)R<sup>25</sup>, -NR<sup>26</sup>C(=O)OR<sup>25a</sup>, -NR<sup>26</sup>C(=O)N(R<sup>25</sup>)<sub>2</sub>, -NR<sup>26</sup>SO<sub>2</sub>N(R<sup>25</sup>)<sub>2</sub>, -NR<sup>26</sup>SO<sub>2</sub>R<sup>25a</sup>, -SO<sub>3</sub>H, -SO<sub>2</sub>R<sup>25a</sup>, -SR<sup>25</sup>, -S(=O)R<sup>25a</sup>, -SO<sub>2</sub>N(R<sup>25</sup>)<sub>2</sub>, -N(R<sup>25</sup>)<sub>2</sub>, =NOR<sup>25</sup>, -C(=O)NHOR<sup>25</sup>, -OCH<sub>2</sub>CO<sub>2</sub>H, and 2-(1-morpholino)ethoxy; and,

R<sup>25</sup>, R<sup>25a</sup>, and R<sup>26</sup> are each independently selected at each occurrence from the group: hydrogen and C<sub>1</sub>-C<sub>6</sub> alkyl.

86. (New) A therapeutic radiopharmaceutical composition  
5 according to claim 85, wherein:

R<sup>1</sup><sub>de</sub> is selected from:



10

A<sup>d</sup> and B<sup>d</sup> are independently -CH<sub>2</sub>-, -O-, -N(R<sup>2d</sup>)-, or -C(=O)-;

A<sup>1d</sup> and B<sup>1d</sup> are independently -CH<sub>2</sub>- or -N(R<sup>3d</sup>)-;

D<sup>d</sup> is -N(R<sup>2d</sup>)-, -O-, -S-, -C(=O)- or -SO<sub>2</sub>-;

5 E<sup>d</sup>-F<sup>d</sup> is -C(R<sup>4d</sup>)=C(R<sup>5d</sup>)-, -N=C(R<sup>4d</sup>)-, -C(R<sup>4d</sup>)=N-, or -  
C(R<sup>4d</sup>)<sub>2</sub>C(R<sup>5d</sup>)<sub>2</sub>-;

β<sup>3</sup>  
10 J<sup>d</sup>, K<sup>d</sup>, L<sup>d</sup> and M<sup>d</sup> are independently selected from: C(R<sup>4d</sup>)-, -  
C(R<sup>5d</sup>)- and -N-, provided that at least one of J<sup>d</sup>, K<sup>d</sup>, L<sup>d</sup>  
and M<sup>d</sup> is not -N-;

R<sup>2d</sup> is selected from: H, C<sub>1</sub>-C<sub>6</sub> alkyl, (C<sub>1</sub>-C<sub>6</sub> alkyl)carbonyl,  
(C<sub>1</sub>-C<sub>6</sub> alkoxy)carbonyl, C<sub>1</sub>-C<sub>6</sub> alkylaminocarbonyl, C<sub>3</sub>-C<sub>6</sub>  
alkenyl, C<sub>3</sub>-C<sub>7</sub> cycloalkyl, C<sub>4</sub>-C<sub>11</sub> cycloalkylalkyl, aryl,  
15 heteroaryl(C<sub>1</sub>-C<sub>6</sub> alkyl)carbonyl, heteroarylcarbonyl,  
aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-, (C<sub>1</sub>-C<sub>6</sub> alkyl)carbonyl, arylcarbonyl,  
alkylsulfonyl, arylsulfonyl, aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)sulfonyl,  
heteroarylsulfonyl, heteroaryl(C<sub>1</sub>-C<sub>6</sub> alkyl)sulfonyl,  
aryloxycarbonyl, and aryl(C<sub>1</sub>-C<sub>6</sub> alkoxy)carbonyl, wherein  
20 said aryl groups are substituted with 0-2 substituents  
selected from the group consisting of C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub>  
alkoxy, halo, CF<sub>3</sub>, and nitro;

25 R<sup>3d</sup> is selected from: H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>7</sub> cycloalkyl, C<sub>4</sub>-C<sub>11</sub>  
cycloalkylalkyl, aryl, aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-, and  
heteroaryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-;

R<sup>4d</sup> and R<sup>5d</sup> are independently selected from: H, C<sub>1</sub>-C<sub>4</sub> alkoxy,  
NR<sup>2d</sup>R<sup>3d</sup>, halogen, NO<sub>2</sub>, CN, CF<sub>3</sub>, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>6</sub> alkenyl,

C<sub>3</sub>-C<sub>7</sub> cycloalkyl, C<sub>4</sub>-C<sub>11</sub> cycloalkylalkyl, aryl, aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-, C<sub>2</sub>-C<sub>7</sub> alkylcarbonyl, and arylcarbonyl;

alternatively, when substituents on adjacent atoms, R<sup>4d</sup> and R<sup>5d</sup>  
 5 can be taken together with the carbon atoms to which they  
 are attached to form a 5-7 membered carbocyclic or 5-7  
 membered heterocyclic aromatic or non-aromatic ring  
 system, said carbocyclic or heterocyclic ring being  
 optionally substituted with 0-2 groups selected from: C<sub>1</sub>-  
 10 C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> alkoxy, halo, cyano, amino, CF<sub>3</sub>, or NO<sub>2</sub>;

U<sup>d</sup> is selected from:

β<sup>3</sup>  
 -(CH<sub>2</sub>)<sub>n</sub><sup>d</sup> -,  
 -(CH<sub>2</sub>)<sub>n</sub><sup>d</sup> (CR<sup>7d</sup>=CR<sup>8d</sup>) (CH<sub>2</sub>)<sub>m</sub><sup>d</sup> -,  
 -(CH<sub>2</sub>)<sub>t</sub><sup>d</sup> Q<sup>d</sup> (CH<sub>2</sub>)<sub>m</sub><sup>d</sup> -,  
 15 -(CH<sub>2</sub>)<sub>n</sub><sup>d</sup> O(CH<sub>2</sub>)<sub>m</sub><sup>d</sup> -,  
 -(CH<sub>2</sub>)<sub>n</sub><sup>d</sup> N(R<sup>6d</sup>) (CH<sub>2</sub>)<sub>m</sub><sup>d</sup> -,  
 -(CH<sub>2</sub>)<sub>n</sub><sup>d</sup> C(=O) (CH<sub>2</sub>)<sub>m</sub><sup>d</sup> -, and  
 -(CH<sub>2</sub>)<sub>n</sub><sup>d</sup> S(O)<sub>p</sub><sup>d</sup> (CH<sub>2</sub>)<sub>m</sub><sup>d</sup> -;

20 wherein one or more of the methylene groups in U<sup>d</sup> is  
 optionally substituted with R<sup>7d</sup>;

Q<sup>d</sup> is selected from 1,2-phenylene, 1,3-phenylene, 2,3-  
 pyridinylene, 3,4-pyridinylene, and 2,4-pyridinylene;

25 R<sup>6d</sup> is selected from: H, C<sub>1</sub>-C<sub>4</sub> alkyl, and benzyl;

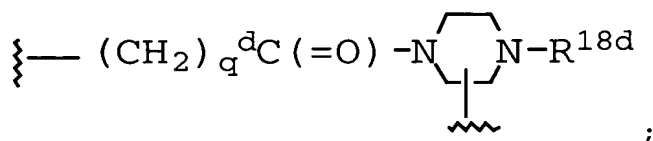
$R^{7d}$  and  $R^{8d}$  are independently selected from: H,  $C_1$ - $C_6$  alkyl,  $C_3$ - $C_7$  cycloalkyl,  $C_4$ - $C_{11}$  cycloalkylalkyl, aryl, aryl( $C_1$ - $C_6$  alkyl)-, and heteroaryl( $C_0$ - $C_6$  alkyl)-;

5

$W^d$  is  $-C(=O)-N(R^{13d})-(C(R^{12d})_2)_q^d-$ ;

$X^d$  is  $-C(R^{12d})(R^{14d})-C(R^{12d})(R^{15d})-$ ;

10 alternatively,  $W^d$  and  $X^d$  can be taken together to be

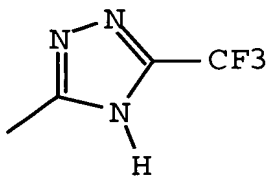
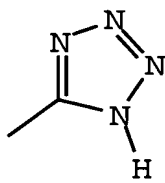


$R^{12d}$  is H or  $C_1$ - $C_6$  alkyl;

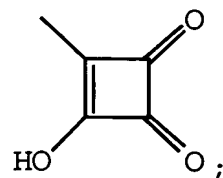
15

$Y^d$  is selected from:

$-COR^{19d}$ ,  $-SO_3H$ ,



, and



20

$d$  is selected from 1, 2, 3, 4, and 5;

$d'$  is 1-50;

25



W is independently selected at each occurrence from the group:

O, NH, NHC(=O), C(=O)NH, NR<sup>8</sup>C(=O), C(=O)N R<sup>8</sup>, C(=O),  
C(=O)O, OC(=O), NHC(=S)NH, NHC(=O)NH, SO<sub>2</sub>, (OCH<sub>2</sub>CH<sub>2</sub>)<sub>s</sub>,  
(CH<sub>2</sub>CH<sub>2</sub>O)<sub>s'</sub>, (OCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>)<sub>s''</sub>, (CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>O)<sub>t</sub>, and (aa)<sub>t'</sub>;

5

aa is independently at each occurrence an amino acid;

Z is selected from the group: aryl substituted with 0-1 R<sup>10</sup>,  
C<sub>3-10</sub> cycloalkyl substituted with 0-1 R<sup>10</sup>, and a 5-10  
10 membered heterocyclic ring system containing 1-4  
heteroatoms independently selected from N, S, and O and  
substituted with 0-1 R<sup>10</sup>;

β<sup>3</sup>

15 R<sup>6</sup>, R<sup>6a</sup>, R<sup>7</sup>, R<sup>7a</sup>, and R<sup>8</sup> are independently selected at each  
occurrence from the group: H, =O, COOH, SO<sub>3</sub>H, C<sub>1</sub>-C<sub>5</sub> alkyl  
substituted with 0-1 R<sup>10</sup>, aryl substituted with 0-1 R<sup>10</sup>,  
benzyl substituted with 0-1 R<sup>10</sup>, and C<sub>1</sub>-C<sub>5</sub> alkoxy  
substituted with 0-1 R<sup>10</sup>, NHC(=O)R<sup>11</sup>, C(=O)NHR<sup>11</sup>,  
NHC(=O)NHR<sup>11</sup>, NHR<sup>11</sup>, R<sup>11</sup>, and a bond to C<sub>H</sub>;

20

k is 0 or 1;

s is selected from 0, 1, 2, 3, 4, and 5;

s' is selected from 0, 1, 2, 3, 4, and 5;

s'' is selected from 0, 1, 2, 3, 4, and 5;

25 t is selected from 0, 1, 2, 3, 4, and 5;

A<sup>1</sup>, A<sup>2</sup>, A<sup>3</sup>, A<sup>4</sup>, A<sup>5</sup>, A<sup>6</sup>, A<sup>7</sup>, and A<sup>8</sup> are independently selected at  
each occurrence from the group: NR<sup>13</sup>, NR<sup>13</sup>R<sup>14</sup>, S, SH,  
S(Pg), OH, and a bond to L<sub>n</sub>;

30

E is a bond, CH, or a spacer group independently selected at  
each occurrence from the group: C<sub>1</sub>-C<sub>10</sub> alkyl substituted  
with 0-3 R<sup>17</sup>, aryl substituted with 0-3 R<sup>17</sup>, C<sub>3-10</sub>

cycloalkyl substituted with 0-3  $R^{17}$ , and a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O and substituted with 0-3  $R^{17}$ ;

5

$R^{13}$  and  $R^{14}$  are each independently selected from the group: a bond to  $L_n$ , hydrogen,  $C_1$ - $C_{10}$  alkyl substituted with 0-3  $R^{17}$ , aryl substituted with 0-3  $R^{17}$ , a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O and substituted with 0-3  $R^{17}$ , and an electron, provided that when one of  $R^{13}$  or  $R^{14}$  is an electron, then the other is also an electron;

10

15 alternatively,  $R^{13}$  and  $R^{14}$  combine to form  $=C(R^{20})(R^{21})$ ;

$R^{17}$  is independently selected at each occurrence from the group: a bond to  $L_n$ ,  $=O$ , F, Cl, Br, I,  $-CF_3$ ,  $-CN$ ,  $-CO_2R^{18}$ ,  $-C(=O)R^{18}$ ,  $-C(=O)N(R^{18})_2$ ,  $-CH_2OR^{18}$ ,  $-OC(=O)R^{18}$ ,  $-OC(=O)OR^{18a}$ ,  $-OR^{18}$ ,  $-OC(=O)N(R^{18})_2$ ,  $-NR^{19}C(=O)R^{18}$ ,  $-NR^{19}C(=O)OR^{18a}$ ,  $-NR^{19}C(=O)N(R^{18})_2$ ,  $-NR^{19}SO_2N(R^{18})_2$ ,  $-NR^{19}SO_2R^{18a}$ ,  $-SO_3H$ ,  $-SO_2R^{18a}$ ,  $-S(=O)R^{18a}$ ,  $-SO_2N(R^{18})_2$ ,  $-N(R^{18})_2$ ,  $-NHC(=S)NHR^{18}$ ,  $=NOR^{18}$ ,  $-C(=O)NHN(R^{18})R^{18a}$ ,  $-OCH_2CO_2H$ , and 2-(1-morpholino)ethoxy;

20

25

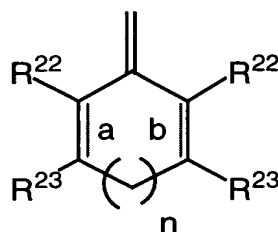
$R^{18}$ ,  $R^{18a}$ , and  $R^{19}$  are independently selected at each occurrence from the group: a bond to  $L_n$ , H, and  $C_1$ - $C_6$  alkyl;

30

$R^{20}$  and  $R^{21}$  are independently selected from the group: H,  $C_1$ - $C_5$  alkyl,  $-CO_2R^{25}$ ,  $C_2$ - $C_5$  1-alkene substituted with 0-3

$R^{23}$ ,  $C_2-C_5$  1-alkyne substituted with 0-3  $R^{23}$ , aryl  
 substituted with 0-3  $R^{23}$ , and unsaturated 5-10 membered  
 heterocyclic ring system containing 1-4 heteroatoms  
 independently selected from N, S, and O and substituted  
 5 with 0-3  $R^{23}$ ;

alternatively,  $R^{20}$  and  $R^{21}$ , taken together with the divalent  
 carbon radical to which they are attached form:



10

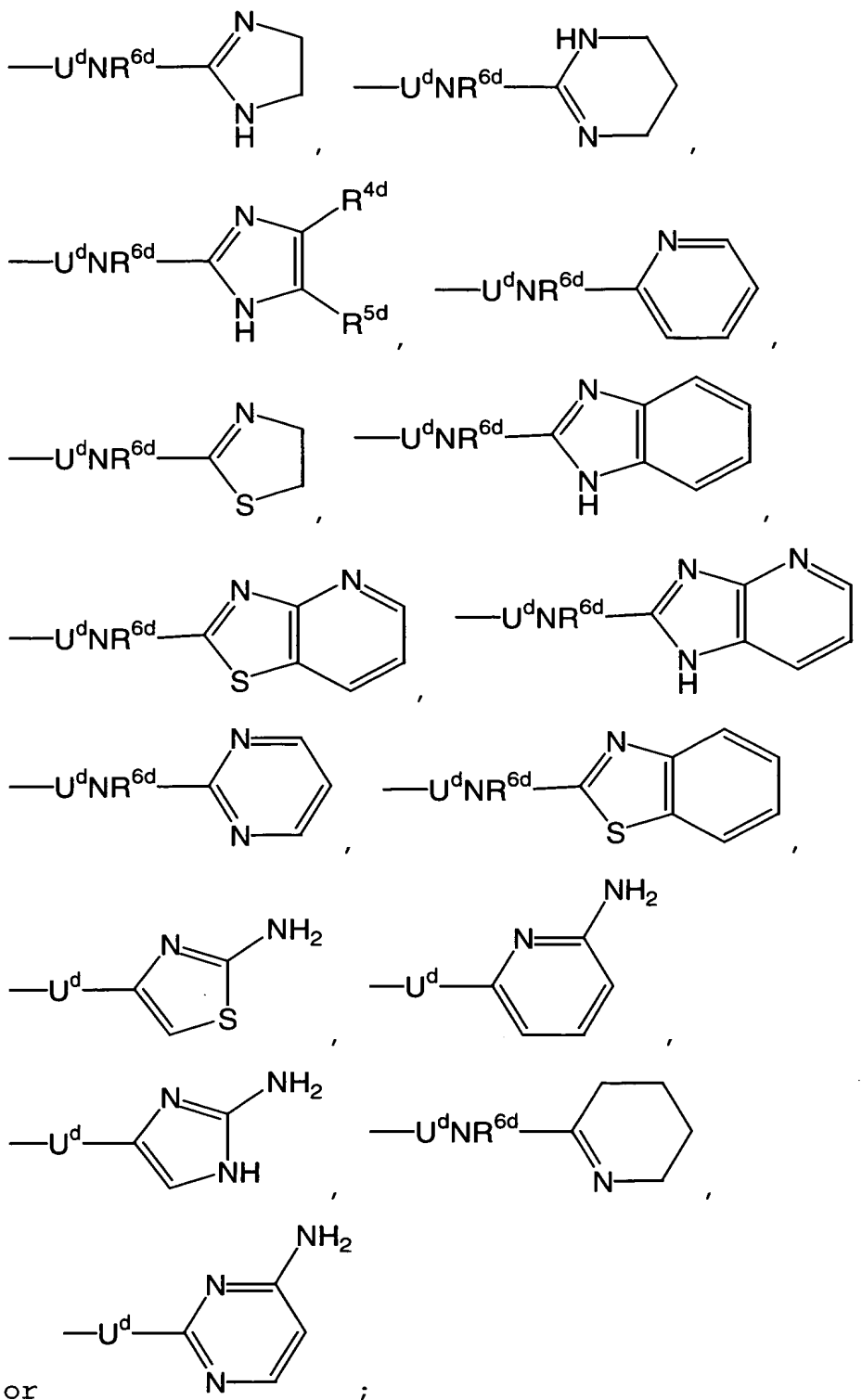
$R^{22}$  and  $R^{23}$  are independently selected from the group: H, and  
 $R^{24}$ ;

alternatively,  $R^{22}$ ,  $R^{23}$  taken together form a fused aromatic or  
 15 a 5-10 membered heterocyclic ring system containing 1-4  
 heteroatoms independently selected from N, S, and O;

$R^{24}$  is independently selected at each occurrence from the  
 group:  $-CO_2R^{25}$ ,  $-C(=O)N(R^{25})_2$ ,  $-CH_2OR^{25}$ ,  $-OC(=O)R^{25}$ ,  
 20  $-OR^{25}$ ,  $-SO_3H$ ,  $-N(R^{25})_2$ , and  $-OCH_2CO_2H$ ; and,

$R^{25}$  is independently selected at each occurrence from the  
 group: H and  $C_1-C_3$  alkyl.

25 87. (New) A therapeutic radiopharmaceutical composition  
 according to claim 85, wherein:

R<sup>1de</sup> is selected from:

10 or

wherein the above heterocycles are optionally substituted with  
 0-2 substituents selected from the group:  $\text{NH}_2$ , halogen,  
 $\text{NO}_2$ ,  $\text{CN}$ ,  $\text{CF}_3$ ,  $\text{C}_1\text{-C}_4$  alkoxy,  $\text{C}_1\text{-C}_6$  alkyl, and  $\text{C}_3\text{-C}_7$   
 cycloalkyl;

5

$\text{U}^{\text{d}}$  is  $-(\text{CH}_2)_n-$ ,  $-(\text{CH}_2)_t\text{Q}^{\text{d}}(\text{CH}_2)_m^{\text{d}}-$  or  $-\text{C}(=\text{O})(\text{CH}_2)_n^{\text{d}}-$ , wherein  
 one of the methylene groups is optionally substituted  
 with  $\text{R}^{7\text{d}}$ ;

10  $\text{R}^{7\text{d}}$  is selected from:  $\text{C}_1\text{-C}_6$  alkyl,  $\text{C}_3\text{-C}_7$  cycloalkyl,  $\text{C}_4\text{-C}_{11}$   
 cycloalkylalkyl, aryl, aryl( $\text{C}_1\text{-C}_6$  alkyl), heteroaryl, and  
 heteroaryl( $\text{C}_1\text{-C}_6$  alkyl);

$\text{R}^{10\text{d}}$  is selected from: H,  $\text{R}^{1\text{de}}$ ,  $\text{C}_1\text{-C}_4$  alkoxy substituted with  
 15 0-1  $\text{R}^{21\text{d}}$ , halogen,  $\text{CO}_2\text{R}^{17\text{d}}$ ,  $\text{CONR}^{17\text{d}}\text{R}^{20\text{d}}$ ,  $\text{C}_1\text{-C}_6$  alkyl  
 substituted with 0-1  $\text{R}^{15\text{d}}$  or 0-1  $\text{R}^{21\text{d}}$ ,  $\text{C}_3\text{-C}_7$  cycloalkyl  
 substituted with 0-1  $\text{R}^{15\text{d}}$  or 0-1  $\text{R}^{21\text{d}}$ ,  $\text{C}_4\text{-C}_{11}$   
 cycloalkylalkyl substituted with 0-1  $\text{R}^{15\text{d}}$  or 0-1  $\text{R}^{21\text{d}}$ , and  
 aryl( $\text{C}_1\text{-C}_6$  alkyl)- substituted with 0-1  $\text{R}^{15\text{d}}$  or 0-2  $\text{R}^{11\text{d}}$  or  
 20 0-1  $\text{R}^{21\text{d}}$ ;

$\text{R}^{10\text{de}}$  is selected from: H,  $\text{C}_1\text{-C}_4$  alkoxy substituted with 0-1  
 $\text{R}^{21\text{d}}$ , halogen,  $\text{CO}_2\text{R}^{17\text{d}}$ ,  $\text{CONR}^{17\text{d}}\text{R}^{20\text{d}}$ ,  $\text{C}_1\text{-C}_6$  alkyl  
 substituted with 0-1  $\text{R}^{15\text{d}}$  or 0-1  $\text{R}^{21\text{d}}$ ,  $\text{C}_3\text{-C}_7$  cycloalkyl  
 25 substituted with 0-1  $\text{R}^{15\text{d}}$  or 0-1  $\text{R}^{21\text{d}}$ ,  $\text{C}_4\text{-C}_{11}$   
 cycloalkylalkyl substituted with 0-1  $\text{R}^{15\text{d}}$  or 0-1  $\text{R}^{21\text{d}}$ , and  
 aryl( $\text{C}_1\text{-C}_6$  alkyl)- substituted with 0-1  $\text{R}^{15\text{d}}$  or 0-2  $\text{R}^{11\text{d}}$  or  
 0-1  $\text{R}^{21\text{d}}$ ;

30  $\text{W}^{\text{d}}$  is  $-\text{C}(=\text{O})-\text{N}(\text{R}^{13\text{d}})-$ ;

$X^d$  is  $-CH(R^{14d})-CH(R^{15d})-$ ;

$R^{13d}$  is H or  $CH_3$ ;

5  $R^{14d}$  is selected from:

H,  $C_1$ - $C_{10}$  alkyl, aryl, or heteroaryl, wherein said aryl or heteroaryl groups are optionally substituted with 0-3 substituents selected from the group consisting of:  $C_1$ - $C_4$  alkyl,  $C_1$ - $C_4$  alkoxy, aryl, halo, cyano, amino,  $CF_3$ , and  
10  $NO_2$ ;

$R^{15d}$  is H or  $R^{16d}$ ;

$Y^d$  is  $-COR^{19d}$ ;

15

$R^{19d}$  is selected from:

hydroxy,  $C_1$ - $C_{10}$  alkoxy,

methylcarbonyloxymethoxy-,

ethylcarbonyloxymethoxy-,

20  $t$ -butylcarbonyloxymethoxy-,

cyclohexylcarbonyloxymethoxy-,

1-(methylcarbonyloxy)ethoxy-,

1-(ethylcarbonyloxy)ethoxy-,

1-( $t$ -butylcarbonyloxy)ethoxy-,

25 1-(cyclohexylcarbonyloxy)ethoxy-,

$i$ -propyloxycarbonyloxymethoxy-,

$t$ -butyloxycarbonyloxymethoxy-,

1-( $i$ -propyloxycarbonyloxy)ethoxy-,

1-(cyclohexyloxycarbonyloxy)ethoxy-,

30 1-( $t$ -butyloxycarbonyloxy)ethoxy-,

dimethylaminoethoxy-,

diethylaminoethoxy-,

DM-6999A

(5-methyl-1,3-dioxacyclopenten-2-on-4-yl)methoxy-,  
(5-(t-butyl)-1,3-dioxacyclopenten-2-on-4-yl)methoxy-,  
(1,3-dioxa-5-phenyl-cyclopenten-2-on-4-yl)methoxy-, and  
1-(2-(2-methoxypropyl)carbonyloxy)ethoxy-;

5

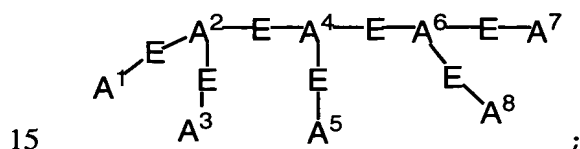
R<sup>20d</sup> is H or CH<sub>3</sub>;

m<sup>d</sup> is 0 or 1;

n<sup>d</sup> is 1-4;

10 t<sup>d</sup> is 0 or 1;

$\beta^3$   
C<sub>h</sub> is



A<sup>1</sup> is selected from the group: OH, and a bond to L<sub>n</sub>;

A<sup>2</sup>, A<sup>4</sup>, and A<sup>6</sup> are each N;

20

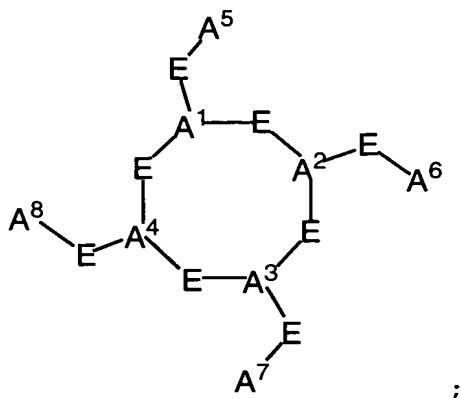
A<sup>3</sup>, A<sup>5</sup>, and A<sup>8</sup> are each OH;

A<sup>7</sup> is a bond to L<sub>n</sub> or NH-bond to L<sub>n</sub>;

25 E is a C<sub>2</sub> alkyl substituted with 0-1 R<sup>17</sup>;

R<sup>17</sup> is =O;

alternatively, C<sub>h</sub> is



5  $A^1$  is selected from the group: OH and a bond to  $L_n$ ;

$A^2$ ,  $A^3$  and  $A^4$  are each N;

$A^5$ ,  $A^6$  and  $A^8$  are each OH;

10

$A^7$  is a bond to  $L_n$ ;

E is a  $C_2$  alkyl substituted with 0-1  $R^{17}$ ;

15  $R^{17}$  is =O;

alternatively,  $C_h$  is  $A^1-E-A^2$ ;

$A^1$  is  $NH_2$  or  $N=C(R^{20})(R^{21})$ ;

20 E is a bond;

$A^2$  is  $NHR^{13}$ ;

25  $R^{13}$  is a heterocycle substituted with  $R^{17}$ , the heterocycle being selected from pyridine and pyrimidine;



R<sup>17</sup> is selected from a bond to L<sub>n</sub>, C(=O)NHR<sup>18</sup> and C(=O)R<sup>18</sup>;

R<sup>18</sup> is a bond to L<sub>n</sub>;

5

R<sup>24</sup> is selected from the group: -CO<sub>2</sub>R<sup>25</sup>, -OR<sup>25</sup>, -SO<sub>3</sub>H, and  
-N(R<sup>25</sup>)<sub>2</sub>; and,

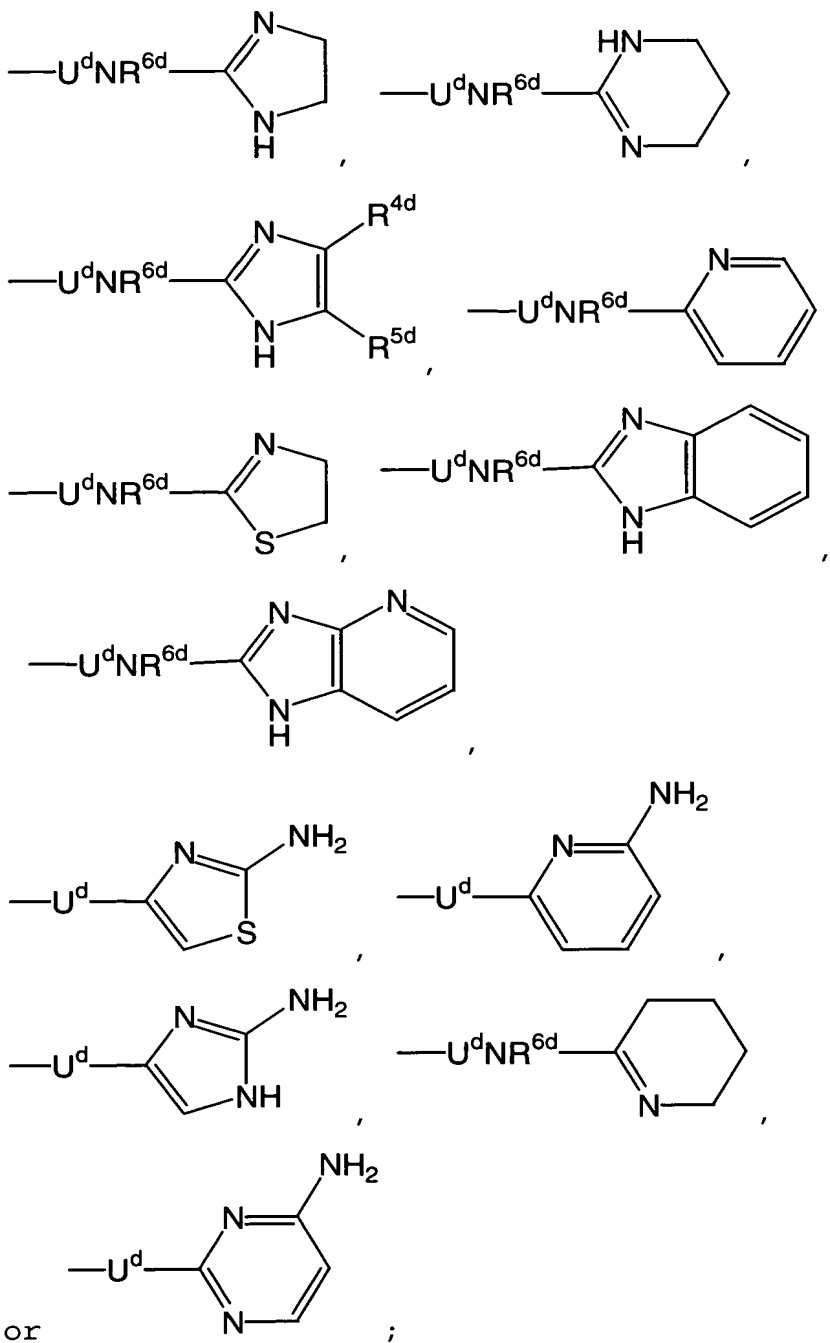
R<sup>25</sup> is independently selected at each occurrence from the  
group: hydrogen and methyl.

10

88. (New) A therapeutic radiopharmaceutical composition  
according to claim 85, wherein:

15

R<sup>1de</sup> is selected from:



10

wherein the above heterocycles are optionally substituted with  
 0-2 substituents selected from the group: NH<sub>2</sub>, halogen,  
 NO<sub>2</sub>, CN, CF<sub>3</sub>, C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>6</sub> alkyl, and C<sub>3</sub>-C<sub>7</sub>  
 cycloalkyl.

15

89. (New) A therapeutic radiopharmaceutical composition according to claim 65, wherein the compound is selected from the group:

5

2-(((4-(4-(((3-(2-(2-(3-((6-((1-aza-2-(2-sulfophenyl)vinyl)amino)(3-pyridyl))carbonylamino)propoxy)-ethoxy)ethoxy)propyl)amino)sulfonyl)-phenyl)phenyl)sulfonyl)amino)-3-((1-(3-(imidazole-2-ylamino)propyl)(1H-indazol-5-yl))carbonylamino)propanoic acid;

10

2-(2-aza-2-((5-(N-(1,3-bis(3-(2-(2-(3-(((4-(4-(((1-carboxy-2-((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))-carbonylamino)ethyl)amino)sulfonyl)-phenyl)phenyl)sulfonyl)amino)propoxy)-ethoxy)ethoxy)propyl)carbamoyl)propyl)carbamoyl)(2-pyridyl))amino)vinyl)benzenesulfonic acid;

20

2-((6-((1-aza-2-(sulfophenyl)vinyl)amino)(3-pyridyl))carbonylamino)-4-(N-(3-(2-(2-(3-(((4-(4-(((1-carboxy-2-((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonylamino)ethyl)amino)sulfonyl)-phenyl)phenyl)sulfonyl)amino)propoxy)-ethoxy)ethoxy)propyl)carbamoyl)butanoic acid;

25

3-((1-(3-(imidazole-2-ylamino)propyl)(1H-indazol-5-yl))carbonylamino)-2-(((4-(4-(((3-(2-(2-(3-(2-(1,4,7,10-tetraaza-4,7,10-tris(carboxymethyl)cyclododecyl)-acetylamino)propoxy)ethoxy)ethoxy)propyl)amino)sulfonyl)-phenyl)phenyl)sulfonyl)amino)propanoic acid;

30

2-(6-((6-((1-aza-2-(2-sulfophenyl)vinyl)-amino)(3-pyridyl))carbonylamino)hexanoylamino)-3-((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonylamino)-propanoic acid;

5

2-((6-((1-aza-2-(2-sulfophenyl)vinyl)-amino)(3-pyridyl))carbonylamino)-3-((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonylamino)propanoic acid;

10

$\beta^3$  [2-[[[5-[carbonyl]-2-pyridinyl]hydrazono]methyl]-benzenesulfonic acid]-Glu(2-(6-aminohexanoylamino)-3-((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonylamino)propanoic acid)(2-(6-aminohexanoylamino)-3-((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonylamino)propanoic acid);

15

[2-[[[5-[carbonyl]-2-pyridinyl]hydrazono]methyl]-benzenesulfonic acid]-Glu-bis-[Glu(2-(6-Aminohexanoylamino)-3-((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonylamino)propanoic acid)(2-(6-aminohexanoylamino)-3-((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonylamino)propanoic acid)];

20

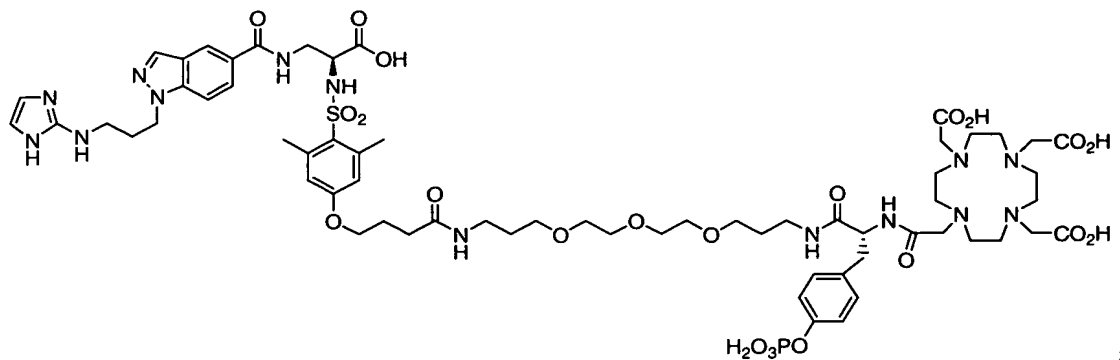
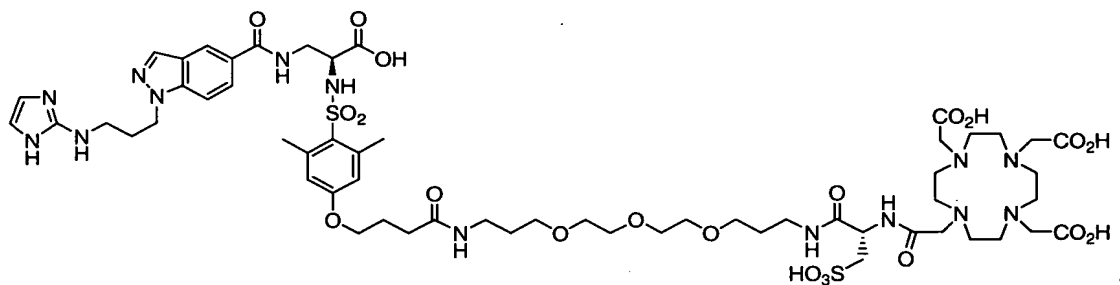
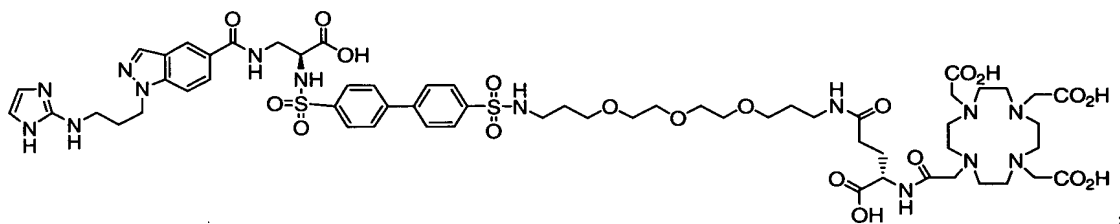
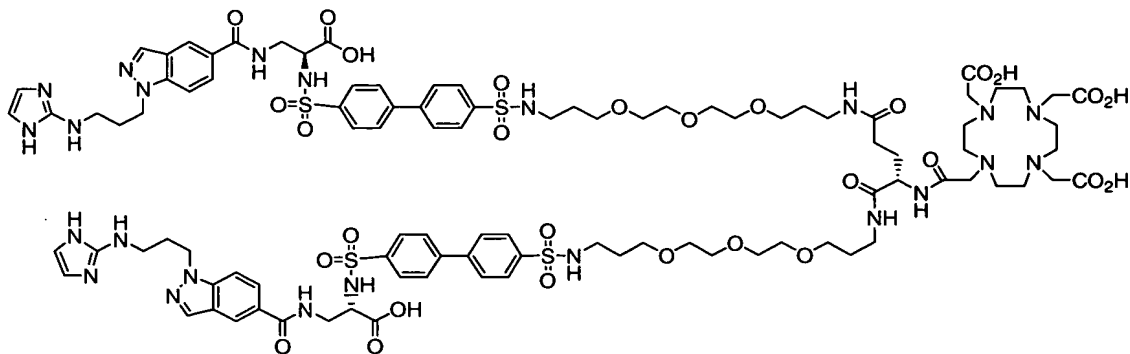
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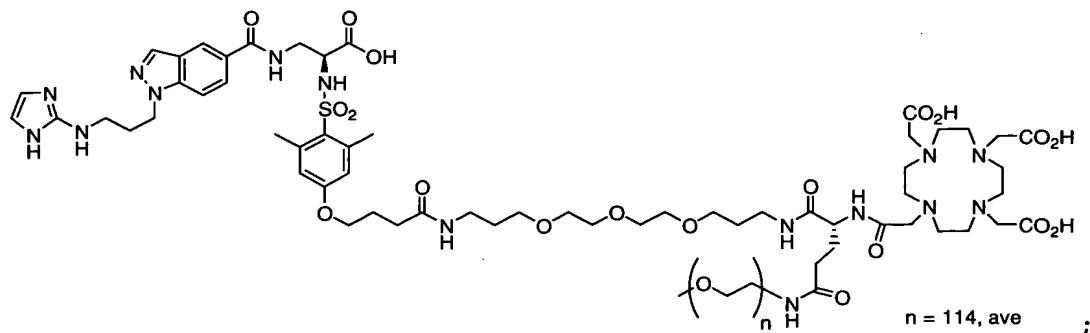
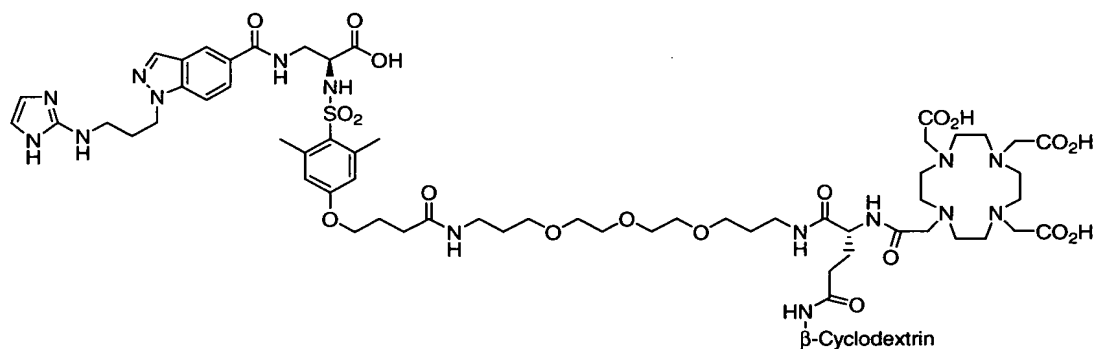
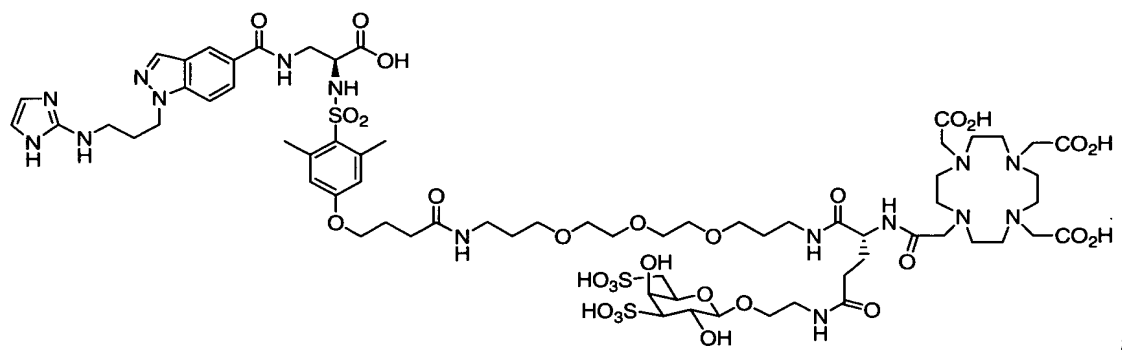
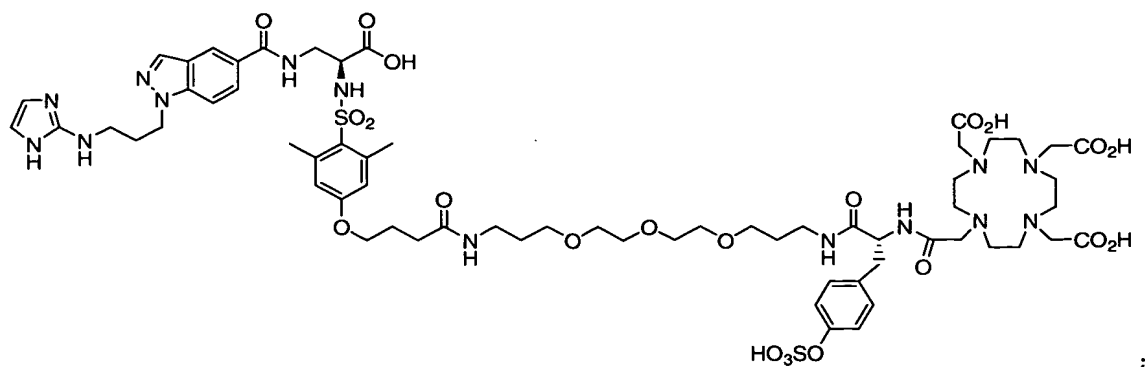
2-(1,4,7,10-tetraaza-4,7,10-tris(carboxymethyl)-1-cyclododecyl)acetyl-{2-(6-aminohexanoylamino)-3-((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonylamino)propanoic acid};

30

2-(1,4,7,10-tetraaza-4,7,10-tris(carboxymethyl)-1-cyclododecyl)acetyl-Glu{2-(6-Aminohexanoylamino)-3-((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonyl-

amino)propanoic acid}{2-(6-Aminohexanoylamino)-3-((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonylamino)propanoic acid};

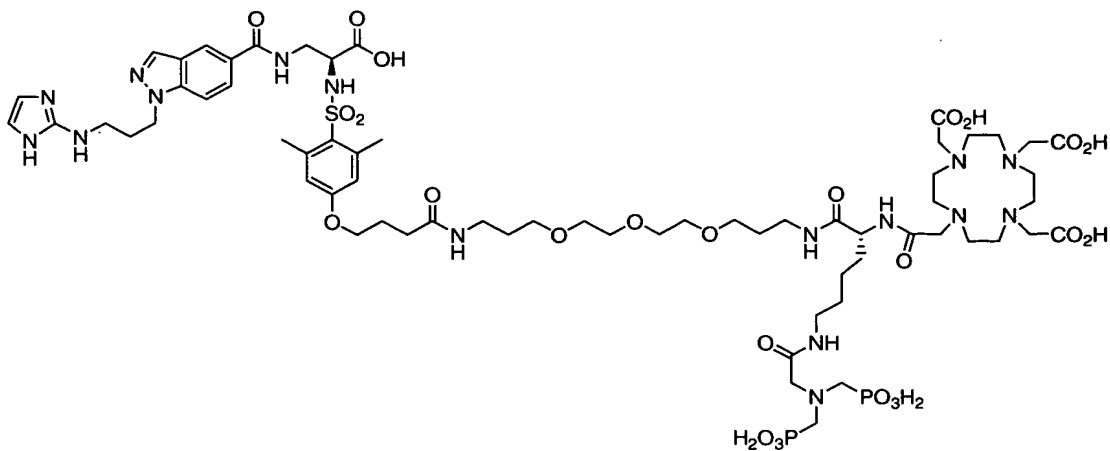




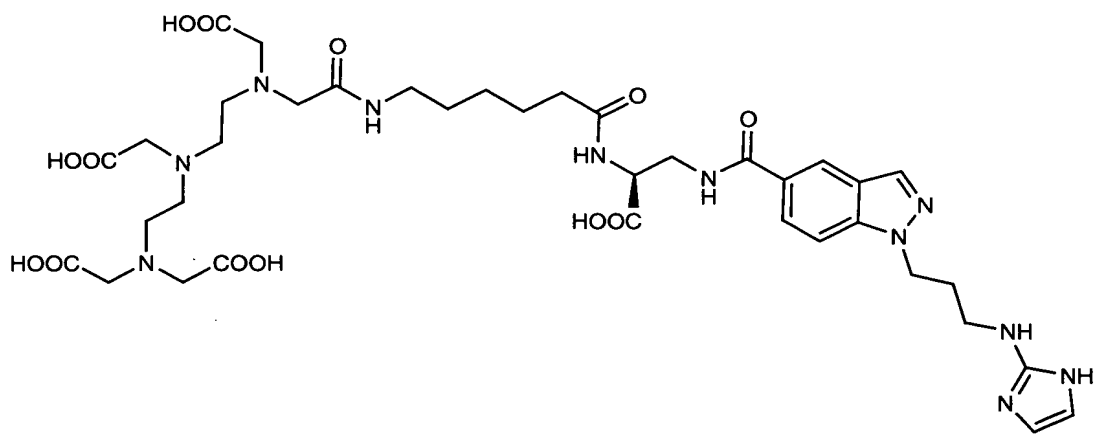
5

2-(((4-(3-(N-(3-(2-(2-(3-(2-(1,4,7,10-tetraaza-4,7,10-tris(carboxymethyl)cyclododecylacetylamino)-6-aminohexanoylamino)propoxy)ethoxy)ethoxy)propyl)-carbamoyl)propoxy)-2,6-dimethylphenyl)sulfonyl)amino)-3-

((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))-carbonylamino)propionic acid salt;

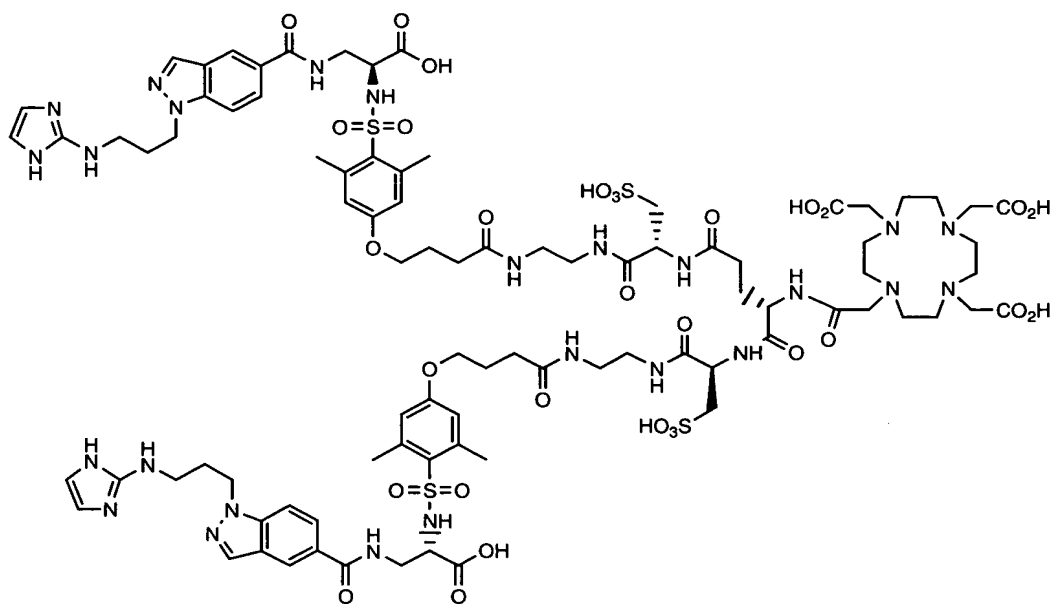


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10

2-({[4-(3-{N-[2-((2R)-3-Sulfo-2-{2-[1,4,7,10-tetraaza-4,7,10-tris(carboxymethyl)cyclododecyl]acetylamino}-propyl)ethyl]carbonyl}propoxy)-2,6-dimethylphenyl]-sulfonyl}amino)(2S)-3-({1-[3-(imidazol-2-ylamino)propyl](1H-indazol-5-yl)}carbonylamino)propanoic Acid;



- 2-[(4-[4-({2-((2R)-3-Sulfo-2-{2-[1,4,7,10-tetraaza-4,7,10-  
 5 tris(carboxymethyl)cyclododecyl]-  
 acetylamino}propyl)ethyl]amino)sulfonyl)phenyl]phenyl}-  
 sulfonyl)amino](2S)-3-({1-[3-(imidazol-2-  
 ylamino)propyl](1H-indazol-5-yl)}carbonylamino)propanoic  
 Acid;
- 10 (4S)-4-(N-{1-[N-(2-{4-[4-({[(1S)-1-carboxy-2-({1-[3-(2-  
 pyridylamino)propyl](1H-indazol-5-  
 yl)}carbonylamino)ethyl]amino)sulfonyl)-3,5-  
 dimethylphenoxy]butanoylamino}ethyl)carbamoyl]-3-  
 carboxypropyl}carbamoyl)-4-{2-[1,4,7,10-tetraaza-4,7,10-  
 15 tris(carboxymethyl)cyclododecyl]acetylamino}butanoic  
 acid;
- (4S)-4-(N-{1-[N-(2-{4-[4-({[(1S)-1-carboxy-2-({1-[3-(imidazol-  
 2-ylamino)propyl](1H-indazol-5-  
 20 yl)}carbonylamino)ethyl]amino)sulfonyl)-3,5-  
 dimethylphenoxy]butanoylamino}ethyl)carbamoyl]-3-  
 carboxypropyl}carbamoyl)-4-{2-[1,4,7,10-tetraaza-4,7,10-



tris(carboxymethyl)cyclododecyl]acetylamino}butanoic  
acid;

5 (4S)-4-{N-[ (1S)-1- (N-{1,3-bis[N-(2-{4-[4-({[(1S)-1-carboxy-2-  
({1-[3-(imidazol-2-ylamino)propyl](1H-indazol-5-  
yl)}carbonylamino)ethyl]amino)sulfonyl)-3,5-  
dimethylphenoxy]butanoylamino)ethyl)carbamoyl]propyl}carb  
amoyl)-3-carboxypropyl]carbamoyl}-4-(6-{2-[1,4,7,10-  
tetraaza-4,7,10-  
10 tris(carboxymethyl)cyclododecyl]acetylamino}  
hexanoylamino)butanoic acid;

15 (4S)-4-(N-{1-[N-(2-{4-[4-({[(1S)-1-carboxy-2-({1-[3-(3,4,5,6-  
tetrahydropyrimidin-2-ylamino)propyl](1H-indazol-5-  
yl)}carbonylamino)ethyl]amino)sulfonyl)-3,5-  
dimethylphenoxy]butanoylamino)ethyl)carbamoyl]-3-carboxy  
propyl}carbamoyl)-4-{2-[1,4,7,10-tetraaza-4,7,10-tris  
(carboxymethyl)cyclododecyl]acetylamino}butanoic acid;

20 (4S)-4-(N-{1-[N-(2-{4-[4-({[(1S)-1-carboxy-2-({1-methyl-3-[3-  
(2-3,4,5,6-tetrahydropyridylamino)propyl](1H-indazol-6-  
yl)}carbonylamino)ethyl]amino)sulfonyl)-3,5-  
dimethylphenoxy]butanoylamino)ethyl)carbamoyl]-3-  
carboxypropyl}carbamoyl)-4-{2-[1,4,7,10-tetraaza-4,7,10-  
25 tris(carboxymethyl)cyclododecyl]acetylamino}butanoic  
acid;

30 (4S)-4-(N-{ (1S)-1-[N-(2-{4-[4-({[(1S)-1-carboxy-2-({1-[2-(2-  
3,4,5,6-tetrahydropyridylamino)ethyl](1H-indazol-5-  
yl)}carbonylamino)ethyl]amino)sulfonyl)-3,5-  
dimethylphenoxy]butanoylamino)ethyl)carbamoyl]-3-carboxy  
propyl}carbamoyl)-4-{2-[1,4,7,10-tetraaza-4,7,10-tris  
(carboxymethyl)cyclododecyl]acetylamino}butanoic acid;

(2S)-2-{{(2,6-dimethyl-4-{3-[N-(2-{2-[1,4,7,10-tetraaza-  
4,7,10-tris(carboxymethyl)cyclododecyl]acetyl-  
amino}ethyl)carbamoyl]propoxy}phenyl)sulfonyl]amino}-3-  
({2-[2-(2-3,4,5,6-tetrahydropyridylamino)ethyl](2-hydro-  
5 1H-indazol-5-yl)}carbonylamino)propanoic acid;

(4S)-4-{N-[(1S)-1-(N-{2-[(4-[4-[(1S)-1-carboxy-2-({1-[2-(2-  
3,4,5,6-tetrahydropyridylamino)ethyl](1H-indazol-5-  
yl)}carbonylamino)ethyl]amino)sulfonyl]phenyl]  
10 phenyl)sulfonyl]amino}ethyl}carbamoyl]-3-carboxypropyl]  
carbamoyl}-4-{2-[1,4,7,10-tetraaza-4,7,10-tris(carboxy-  
methyl)cyclododecyl]acetylamino}butanoic acid;

(4S)-4-{N-[(1S)-1-(N-{2-[(4-[4-[(1S)-1-carboxy-2-({1-[3-  
15 (3,4,5,6-tetrahydropyrimidin-2-ylamino) propyl](1H-  
indazol-5-yl)}carbonylamino)ethyl]amino)sulfonyl]  
phenyl]phenyl)sulfonyl]amino}ethyl}carbamoyl]-3-carboxy  
propyl]carbamoyl}-4-{2-[1,4,7,10-tetraaza-4,7,10-tris  
(carboxymethyl)cyclododecyl]acetylamino}butanoic acid;

(2S)-3-({3-[(imidazol-2-ylamino) methyl]-1-methyl(1H-indazol-  
6-yl)}carbonylamino)-2-({[4-(4-{(2-{2-[1,4,7,10-  
tetraaza-4,7,10-tris(carboxymethyl)  
cyclododecyl]acetylamino}ethyl)amino}sulfonyl]phenyl)phen  
25 yl}sulfonyl]amino)propanoic acid;

3-[(7-{3-[(6-{(1E)-1-aza-2-(2-sulfophenyl)vinyl]amino}(3-  
pyridyl))carbonylamino]propoxy}-1-[3-(imidazol-2-  
ylamino)propyl](1H-indazol-5-yl))-carbonylamino](2S)-2-  
30 {[2,4,6-trimethylphenyl)sulfonyl]-amino}propanoic acid;  
and

3-{{1-[3-(imidazol-2-ylamino)propyl]-7-(3-{2-[1,4,7,10-  
tetraaza-4,7,10-tris(carboxymethyl)cyclododecyl]-

acetylamino}propoxy) (1H-indazol-5-yl)]carbonylamino}-2-  
 {[ (2,4,6-trimethylphenyl)sulfonyl]amino}propanoic acid;

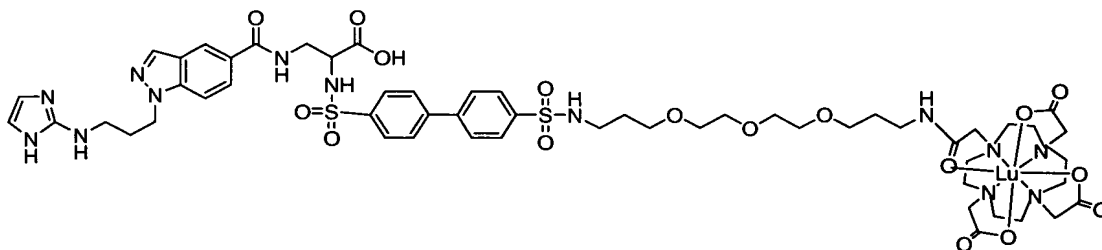
or a pharmaceutically acceptable salt form thereof.

5

90. (New) A therapeutic radiopharmaceutical composition according to Claim 85, wherein the radioisotope is  $^{177}\text{Lu}$  or  $^{153}\text{Sm}$ .

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91. (New) A therapeutic radiopharmaceutical composition according to Claim 65, wherein the radiopharmaceutical is



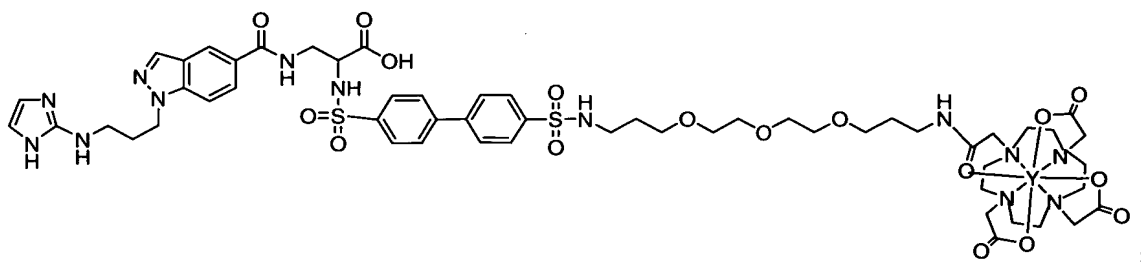
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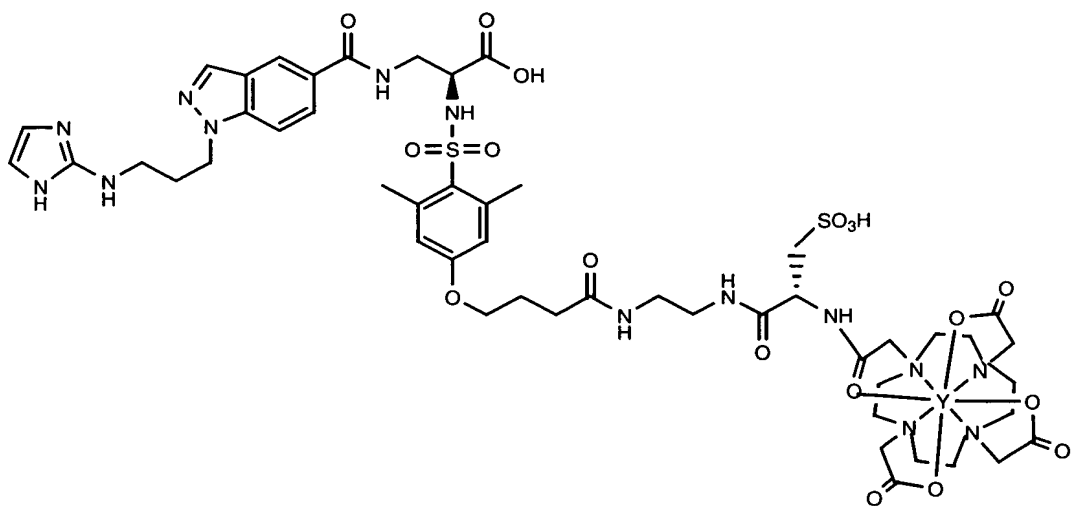
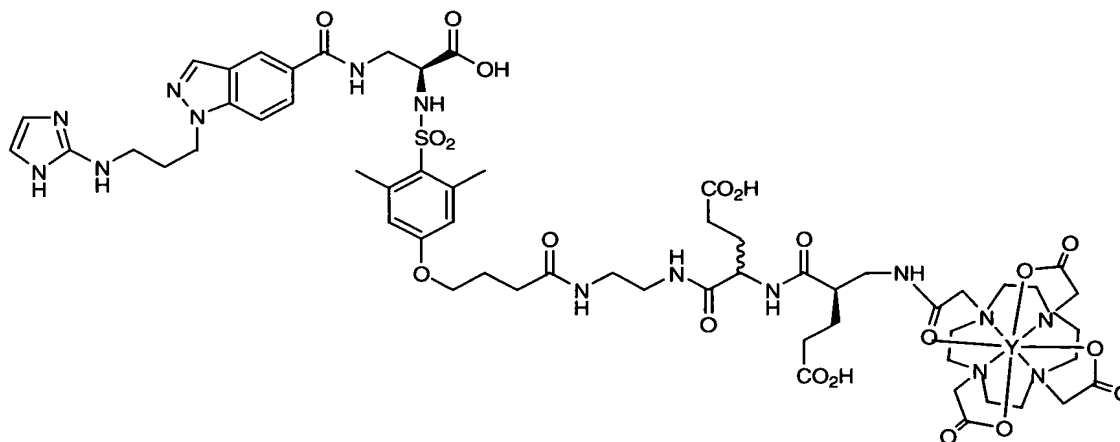
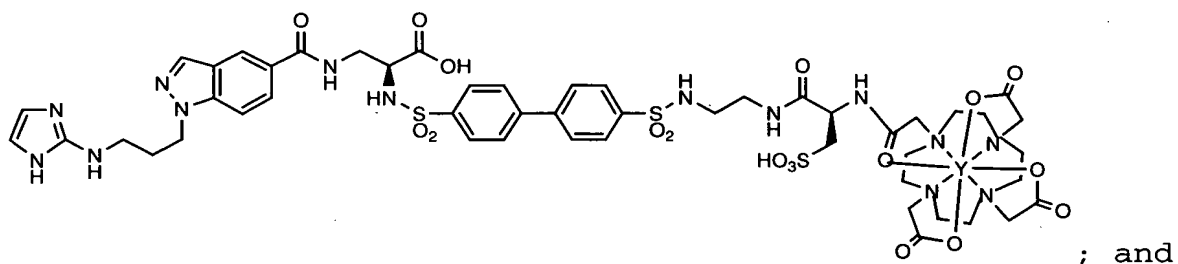
92. (New) A therapeutic radiopharmaceutical composition according to Claim 85, wherein the radioisotope is  $^{90}\text{Y}$ .

93. (New) A therapeutic radiopharmaceutical composition according to Claim 65, wherein the radiopharmaceutical is

20

selected from the group:



 $B^3$ 

5

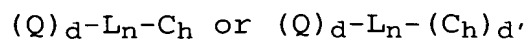
94. (New) A method according to claim 68, wherein the targeting moiety is an indazole non-peptide and the receptor is  $\alpha_v\beta_3$  or  $\alpha_v\beta_5$ .

10

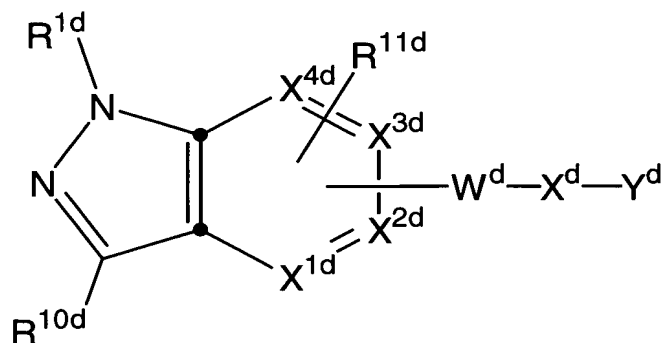
95. (New) A method according to claim 68, wherein:

the therapeutic metal is selected from the group:  $^{33}\text{P}$ ,  $^{125}\text{I}$ ,  $^{186}\text{Re}$ ,  $^{188}\text{Re}$ ,  $^{153}\text{Sm}$ ,  $^{166}\text{Ho}$ ,  $^{177}\text{Lu}$ ,  $^{149}\text{Pm}$ ,  $^{90}\text{Y}$ ,  $^{212}\text{Bi}$ ,  $^{103}\text{Pd}$ ,  $^{109}\text{Pd}$ ,  $^{159}\text{Gd}$ ,  $^{140}\text{La}$ ,  $^{198}\text{Au}$ ,  $^{199}\text{Au}$ ,  $^{169}\text{Yb}$ ,  $^{175}\text{Yb}$ ,  $^{165}\text{Dy}$ ,  $^{166}\text{Dy}$ ,  $^{67}\text{Cu}$ ,  $^{105}\text{Rh}$ ,  $^{111}\text{Ag}$ , and  $^{192}\text{Ir}$ ; and

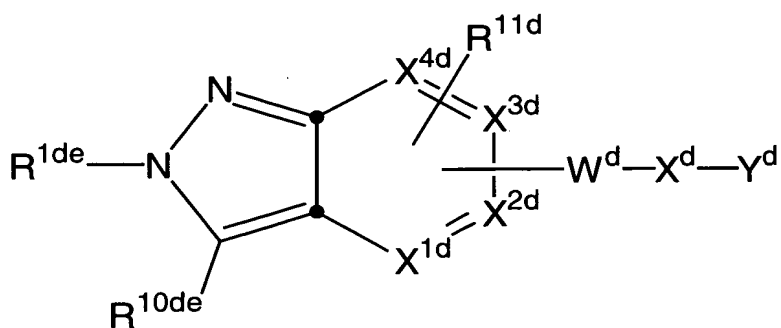
5 the compound is of the formula:



wherein, Q is independently a compound of Formula (Ia) or  
 10 (Ib):



(Ia)



(Ib)

including stereoisomeric forms thereof, or mixtures of  
 20 stereoisomeric forms thereof, or pharmaceutically acceptable salt or prodrug forms thereof wherein:

$X^{1d}$  is N, CH, C-  $W^d$ -  $X^d$ -  $Y^d$ , or C- $L_n$ ;

$X^{2d}$  is N, CH, or C-  $W^d$ -  $X^d$ -  $Y^d$ ;

$X^{3d}$  is N,  $CR^{11d}$ , or C-  $W^d$ -  $X^d$ -  $Y^d$ ;

$X^{4d}$  is N or  $CR^{11d}$ ;

5

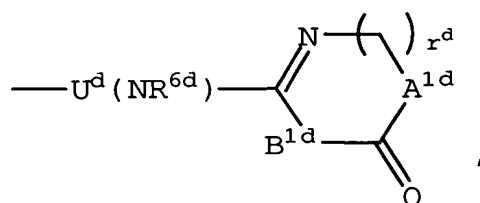
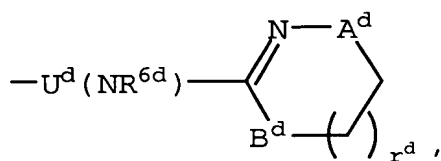
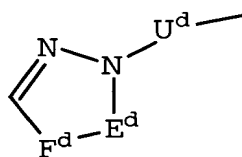
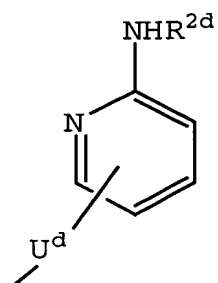
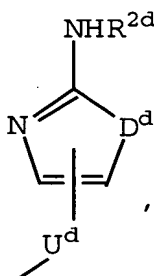
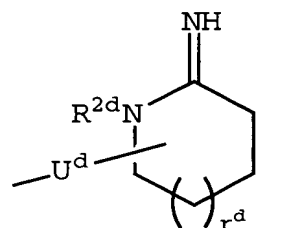
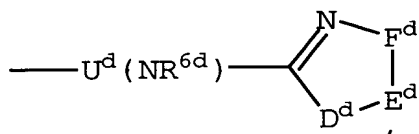
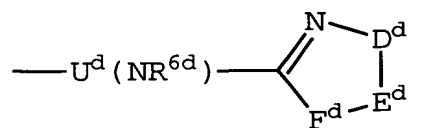
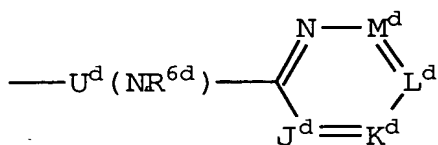
provided that when  $R^{1d}$  is  $R^{1de}$  then one of  $X^{1d}$  and  $X^{2d}$  is C-  $W^d$ -  $X^d$ -  $Y^d$ , and when  $R^{10d}$  is  $R^{1de}$  then  $X^{3d}$  is C-  $W^d$ -  $X^d$ -  $Y^d$ ;

$R^{1d}$  is selected from:  $R^{1de}$ ,  $C_1$ - $C_6$  alkyl substituted with 0-1  $R^{15d}$  or 0-1  $R^{21d}$ ,  $C_3$ - $C_6$  alkenyl substituted with 0-1  $R^{15d}$  or 0-1  $R^{21d}$ ,  $C_3$ - $C_7$  cycloalkyl substituted with 0-1  $R^{15d}$  or 0-1  $R^{21d}$ ,  $C_4$ - $C_{11}$  cycloalkylalkyl substituted with 0-1  $R^{15d}$  or 0-1  $R^{21d}$ , aryl substituted with 0-1  $R^{15d}$  or 0-2  $R^{11d}$  or 0-1  $R^{21d}$ , and aryl( $C_1$ - $C_6$  alkyl)- substituted with 0-1  $R^{15d}$  or 0-2  $R^{11d}$  or 0-1  $R^{21d}$ ;

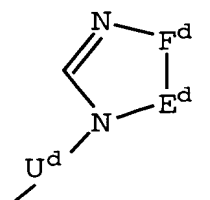
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$R^{1de}$  is selected from:

 $\beta^3$ 

or



5

A<sup>d</sup> and B<sup>d</sup> are independently -CH<sub>2</sub>-, -O-, -N(R<sup>2d</sup>)-, or -C(=O)-;

A<sup>1d</sup> and B<sup>1d</sup> are independently -CH<sub>2</sub>- or -N(R<sup>3d</sup>)-;

D<sup>d</sup> is -N(R<sup>2d</sup>)-, -O-, -S-, -C(=O)- or -SO<sub>2</sub>-;

5

E<sup>d</sup>-F<sup>d</sup> is -C(R<sup>4d</sup>)=C(R<sup>5d</sup>)-, -N=C(R<sup>4d</sup>)-, -C(R<sup>4d</sup>)=N-, or  
-C(R<sup>4d</sup>)<sub>2</sub>C(R<sup>5d</sup>)<sub>2</sub>-;

J<sup>d</sup>, K<sup>d</sup>, L<sup>d</sup> and M<sup>d</sup> are independently selected from

10 -C(R<sup>4d</sup>)-, -C(R<sup>5d</sup>)- and -N-, provided that at least one of  
J<sup>d</sup>, K<sup>d</sup>, L<sup>d</sup> and M<sup>d</sup> is not -N-;

R<sup>2d</sup> is selected from: H, C<sub>1</sub>-C<sub>6</sub> alkyl, (C<sub>1</sub>-C<sub>6</sub> alkyl)carbonyl,

(C<sub>1</sub>-C<sub>6</sub> alkoxy)carbonyl; (C<sub>1</sub>-C<sub>6</sub> alkyl)aminocarbonyl, C<sub>3</sub>-C<sub>6</sub>

15 alkenyl, C<sub>3</sub>-C<sub>7</sub> cycloalkyl, C<sub>4</sub>-C<sub>11</sub> cycloalkylalkyl, aryl,

heteroaryl(C<sub>1</sub>-C<sub>6</sub> alkyl)carbonyl, heteroarylcabonyl,

aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-, (C<sub>1</sub>-C<sub>6</sub> alkyl)carbonyl-, arylcarbonyl,

C<sub>1</sub>-C<sub>6</sub> alkylsulfonyl, arylsulfonyl, aryl(C<sub>1</sub>-C<sub>6</sub>

alkyl)sulfonyl, heteroarylsulfonyl, heteroaryl(C<sub>1</sub>-C<sub>6</sub>

20 alkyl)sulfonyl, aryloxycarbonyl, and aryl(C<sub>1</sub>-C<sub>6</sub>

alkoxy)carbonyl, wherein said aryl groups are substituted

with 0-2 substituents selected from the group: C<sub>1</sub>-C<sub>4</sub>

alkyl, C<sub>1</sub>-C<sub>4</sub> alkoxy, halo, CF<sub>3</sub>, and nitro;

25 R<sup>3d</sup> is selected from: H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>7</sub> cycloalkyl, C<sub>4</sub>-C<sub>11</sub>

cycloalkylalkyl, aryl, aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-, and

heteroaryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-;

R<sup>4d</sup> and R<sup>5d</sup> are independently selected from: H, C<sub>1</sub>-C<sub>4</sub> alkoxy,

30 NR<sup>2d</sup>R<sup>3d</sup>, halogen, NO<sub>2</sub>, CN, CF<sub>3</sub>, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>6</sub> alkenyl,

C<sub>3</sub>-C<sub>7</sub> cycloalkyl, C<sub>4</sub>-C<sub>11</sub> cycloalkylalkyl, aryl, aryl(C<sub>1</sub>-C<sub>6</sub>



alkyl)-, (C<sub>1</sub>-C<sub>6</sub> alkyl)carbonyl, (C<sub>1</sub>-C<sub>6</sub> alkoxy)carbonyl,  
and arylcarbonyl, or

alternatively, when substituents on adjacent atoms, R<sup>4d</sup> and R<sup>5d</sup>

- 5 can be taken together with the carbon atoms to which they  
are attached to form a 5-7 membered carbocyclic or 5-7  
membered heterocyclic aromatic or non-aromatic ring  
system, said carbocyclic or heterocyclic ring being  
optionally substituted with 0-2 groups selected from: C<sub>1</sub>-  
10 C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> alkoxy, halo, cyano, amino, CF<sub>3</sub>, and NO<sub>2</sub>;

U<sup>d</sup> is selected from:

- (CH<sub>2</sub>)<sub>n</sub><sup>d</sup>-,  
- (CH<sub>2</sub>)<sub>n</sub><sup>d</sup>(CR<sup>7d</sup>=CR<sup>8d</sup>) (CH<sub>2</sub>)<sub>m</sub><sup>d</sup>-,  
15 - (CH<sub>2</sub>)<sub>n</sub><sup>d</sup>(C≡C) (CH<sub>2</sub>)<sub>m</sub><sup>d</sup>-,  
- (CH<sub>2</sub>)<sub>t</sub><sup>d</sup>Q (CH<sub>2</sub>)<sub>m</sub><sup>d</sup>-,  
- (CH<sub>2</sub>)<sub>n</sub><sup>d</sup>O (CH<sub>2</sub>)<sub>m</sub><sup>d</sup>-,  
- (CH<sub>2</sub>)<sub>n</sub><sup>d</sup>N(R<sup>6d</sup>) (CH<sub>2</sub>)<sub>m</sub><sup>d</sup>-,  
- (CH<sub>2</sub>)<sub>n</sub><sup>d</sup>C(=O) (CH<sub>2</sub>)<sub>m</sub><sup>d</sup>-,  
20 - (CH<sub>2</sub>)<sub>n</sub><sup>d</sup>(C=O)N(R<sup>6d</sup>) (CH<sub>2</sub>)<sub>m</sub><sup>d</sup>-,  
- (CH<sub>2</sub>)<sub>n</sub><sup>d</sup>N(R<sup>6d</sup>) (C=O) (CH<sub>2</sub>)<sub>m</sub><sup>d</sup>-, and  
- (CH<sub>2</sub>)<sub>n</sub><sup>d</sup>S(O)<sub>p</sub><sup>d</sup>(CH<sub>2</sub>)<sub>m</sub><sup>d</sup>-;

wherein one or more of the methylene groups in U<sup>d</sup> is  
optionally substituted with R<sup>7d</sup>;

25

Q<sup>d</sup> is selected from 1,2-cycloalkylene, 1,2-phenylene, 1,3-  
phenylene, 1,4-phenylene, 2,3-pyridinylene, 3,4-  
pyridinylene, 2,4-pyridinylene, and 3,4-pyridazinylene;

- 30 R<sup>6d</sup> is selected from: H, C<sub>1</sub>-C<sub>4</sub> alkyl, and benzyl;

R<sup>7d</sup> and R<sup>8d</sup> are independently selected from: H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>7</sub> cycloalkyl, C<sub>4</sub>-C<sub>11</sub> cycloalkylalkyl, aryl, aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-, and heteroaryl(C<sub>0</sub>-C<sub>6</sub> alkyl)-;

5

R<sup>10d</sup> is selected from: H, R<sup>1de</sup>, C<sub>1</sub>-C<sub>4</sub> alkoxy substituted with 0-1 R<sup>21d</sup>, N(R<sup>6d</sup>)<sub>2</sub>, halogen, NO<sub>2</sub>, CN, CF<sub>3</sub>, CO<sub>2</sub>R<sup>17d</sup>, C(=O)R<sup>17d</sup>, CONR<sup>17d</sup>R<sup>20d</sup>, -SO<sub>2</sub>R<sup>17d</sup>, -SO<sub>2</sub>NR<sup>17d</sup>R<sup>20d</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl substituted with 0-1 R<sup>15d</sup> or 0-1 R<sup>21d</sup>, C<sub>3</sub>-C<sub>6</sub> alkenyl substituted with 0-1 R<sup>15d</sup> or 0-1 R<sup>21d</sup>, C<sub>3</sub>-C<sub>7</sub> cycloalkyl substituted with 0-1 R<sup>15d</sup> or 0-1 R<sup>21d</sup>, C<sub>4</sub>-C<sub>11</sub> cycloalkylalkyl substituted with 0-1 R<sup>15d</sup> or 0-1 R<sup>21d</sup>, aryl substituted with 0-1 R<sup>15d</sup> or 0-2 R<sup>11d</sup> or 0-1 R<sup>21d</sup>, and aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)- substituted with 0-1 R<sup>15d</sup> or 0-2 R<sup>11d</sup> or 0-1 R<sup>21d</sup>;

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R<sup>10de</sup> is selected from: H, C<sub>1</sub>-C<sub>4</sub> alkoxy substituted with 0-1 R<sup>21d</sup>, N(R<sup>6d</sup>)<sub>2</sub>, halogen, NO<sub>2</sub>, CN, CF<sub>3</sub>, CO<sub>2</sub>R<sup>17d</sup>, C(=O)R<sup>17d</sup>, CONR<sup>17d</sup>R<sup>20d</sup>, -SO<sub>2</sub>R<sup>17d</sup>, -SO<sub>2</sub>NR<sup>17d</sup>R<sup>20d</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl substituted with 0-1 R<sup>15d</sup> or 0-1 R<sup>21d</sup>, C<sub>3</sub>-C<sub>6</sub> alkenyl substituted with 0-1 R<sup>15d</sup> or 0-1 R<sup>21d</sup>, C<sub>3</sub>-C<sub>7</sub> cycloalkyl substituted with 0-1 R<sup>15d</sup> or 0-1 R<sup>21d</sup>, C<sub>4</sub>-C<sub>11</sub> cycloalkylalkyl substituted with 0-1 R<sup>15d</sup> or 0-1 R<sup>21d</sup>, aryl substituted with 0-1 R<sup>15d</sup> or 0-2 R<sup>11d</sup> or 0-1 R<sup>21d</sup>, and aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)- substituted with 0-1 R<sup>15d</sup> or 0-2 R<sup>11d</sup> or 0-1 R<sup>21d</sup>;

20

25

R<sup>11d</sup> is selected from H, halogen, CF<sub>3</sub>, CN, NO<sub>2</sub>, hydroxy, NR<sup>2d</sup>R<sup>3d</sup>, C<sub>1</sub>-C<sub>4</sub> alkyl substituted with 0-1 R<sup>21d</sup>, C<sub>1</sub>-C<sub>4</sub> alkoxy substituted with 0-1 R<sup>21d</sup>, aryl substituted with 0-1 R<sup>21d</sup>, aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)- substituted with 0-1 R<sup>21d</sup>,

30

(C<sub>1</sub>-C<sub>4</sub> alkoxy)carbonyl substituted with 0-1 R<sup>21d</sup>, (C<sub>1</sub>-C<sub>4</sub> alkyl)carbonyl substituted with 0-1 R<sup>21d</sup>, C<sub>1</sub>-C<sub>4</sub> alkylsulfonyl substituted with 0-1 R<sup>21d</sup>, and C<sub>1</sub>-C<sub>4</sub> alkylaminosulfonyl substituted with 0-1 R<sup>21d</sup>;

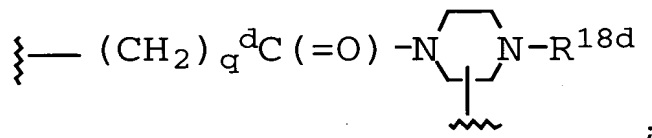
5

W<sup>d</sup> is selected from:

-(C(R<sup>12d</sup>)<sub>2</sub>)<sub>q</sub><sup>d</sup>C(=O)N(R<sup>13d</sup>)-, and

-C(=O)-N(R<sup>13d</sup>)-(C(R<sup>12d</sup>)<sub>2</sub>)<sub>q</sub><sup>d</sup>-;

10 X<sup>d</sup> is -C(R<sup>12d</sup>)(R<sup>14d</sup>)-C(R<sup>12d</sup>)(R<sup>15d</sup>)-; or alternatively, W<sup>d</sup> and X<sup>d</sup> can be taken together to be



15 R<sup>12d</sup> is selected from H, halogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl, C<sub>2</sub>-C<sub>6</sub> alkynyl, C<sub>3</sub>-C<sub>7</sub> cycloalkyl, C<sub>4</sub>-C<sub>10</sub> cycloalkylalkyl, (C<sub>1</sub>-C<sub>4</sub> alkyl)carbonyl, aryl, and aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-;

20 R<sup>13d</sup> is selected from H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>7</sub> cycloalkylmethyl, and aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-;

R<sup>14d</sup> is selected from:

H, C<sub>1</sub>-C<sub>6</sub> alkylthio(C<sub>1</sub>-C<sub>6</sub> alkyl)-, aryl(C<sub>1</sub>-C<sub>10</sub> alkylthioalkyl)-, aryl(C<sub>1</sub>-C<sub>10</sub> alkoxyalkyl)-, C<sub>1</sub>-C<sub>10</sub> alkyl, 25 C<sub>1</sub>-C<sub>10</sub> alkoxyalkyl, C<sub>1</sub>-C<sub>6</sub> hydroxyalkyl, C<sub>2</sub>-C<sub>10</sub> alkenyl, C<sub>2</sub>-C<sub>10</sub> alkynyl, C<sub>3</sub>-C<sub>10</sub> cycloalkyl, C<sub>3</sub>-C<sub>10</sub> cycloalkylalkyl, aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-, heteroaryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-, aryl, heteroaryl, CO<sub>2</sub>R<sup>17d</sup>, C(=O)R<sup>17d</sup>, and CONR<sup>17d</sup>R<sup>20d</sup>, provided that any of the above alkyl, cycloalkyl, aryl or

heteroaryl groups may be unsubstituted or substituted independently with 0-1  $R^{16d}$  or 0-2  $R^{11d}$ ;

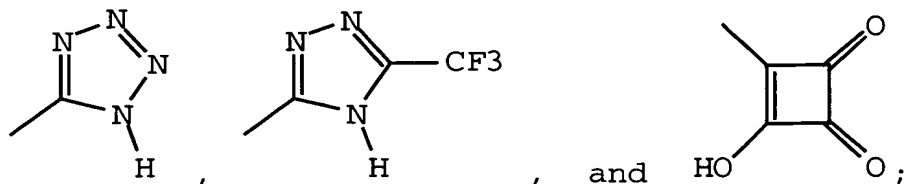
$R^{15d}$  is selected from:

- 5 H,  $R^{16d}$ ,  $C_1-C_{10}$  alkyl,  $C_1-C_{10}$  alkoxyalkyl,  $C_1-C_{10}$  alkylaminoalkyl,  $C_1-C_{10}$  dialkylaminoalkyl,  $(C_1-C_{10}$  alkyl)carbonyl, aryl( $C_1-C_6$  alkyl)carbonyl,  $C_1-C_{10}$  alkenyl,  $C_1-C_{10}$  alkynyl,  $C_3-C_{10}$  cycloalkyl,  $C_3-C_{10}$  cycloalkylalkyl, aryl( $C_1-C_6$  alkyl)-, heteroaryl( $C_1-C_6$  alkyl)-, aryl,
- 10 heteroaryl,  $CO_2R^{17d}$ ,  $C(=O)R^{17d}$ ,  $CONR^{17d}R^{20d}$ ,  $SO_2R^{17d}$ , and  $SO_2NR^{17d}R^{20d}$ , provided that any of the above alkyl, cycloalkyl, aryl or heteroaryl groups may be unsubstituted or substituted independently with 0-2  $R^{11d}$ ;

15  $Y^d$  is selected from:

$-COR^{19d}$ ,  $-SO_3H$ ,  $-PO_3H$ , tetrazolyl,  $-CONHNHSO_2CF_3$ ,  $-CONHSO_2R^{17d}$ ,  $-CONHSO_2NHR^{17d}$ ,  $-NHCOCF_3$ ,  $-NHCONHSO_2R^{17d}$ ,  $-NHSO_2R^{17d}$ ,  $-OPO_3H_2$ ,  $-OSO_3H$ ,  $-PO_3H_2$ ,  $-SO_3H$ ,  $-SO_2NHCOR^{17d}$ ,  $-SO_2NHCO_2R^{17d}$ ,

20



$R^{16d}$  is selected from:

- $-N(R^{20d})-C(=O)-O-R^{17d}$ ,
- 25  $-N(R^{20d})-C(=O)-R^{17d}$ ,
- $-N(R^{20d})-C(=O)-NH-R^{17d}$ ,
- $-N(R^{20d})SO_2-R^{17d}$ , and
- $-N(R^{20d})SO_2-NR^{20d}R^{17d}$ ;

R<sup>17d</sup> is selected from:

C<sub>1</sub>-C<sub>10</sub> alkyl optionally substituted with a bond to L<sub>n</sub>, C<sub>3</sub>-  
 C<sub>11</sub> cycloalkyl optionally substituted with a bond to L<sub>n</sub>,  
 aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)- optionally substituted with a bond to  
 5 L<sub>n</sub>, (C<sub>1</sub>-C<sub>6</sub> alkyl)aryl optionally substituted with a bond  
 to L<sub>n</sub>, heteroaryl(C<sub>1</sub>-C<sub>6</sub> alkyl)- optionally substituted  
 with a bond to L<sub>n</sub>, (C<sub>1</sub>-C<sub>6</sub> alkyl)heteroaryl optionally  
 substituted with a bond to L<sub>n</sub>, biaryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-  
 optionally substituted with a bond to L<sub>n</sub>, heteroaryl  
 10 optionally substituted with a bond to L<sub>n</sub>, aryl optionally  
 substituted with a bond to L<sub>n</sub>, biaryl optionally  
 substituted with a bond to L<sub>n</sub>, and a bond to L<sub>n</sub>, wherein  
 said aryl, biaryl or heteroaryl groups are also  
 optionally substituted with 0-3 substituents selected  
 15 from the group consisting of: C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> alkoxy,  
 aryl, heteroaryl, halo, cyano, amino, CF<sub>3</sub>, and NO<sub>2</sub>;

R<sup>18d</sup> is selected from:

-H,  
 20 -C(=O)-O-R<sup>17d</sup>,  
 -C(=O)-R<sup>17d</sup>,  
 -C(=O)-NH-R<sup>17d</sup>,  
 -SO<sub>2</sub>-R<sup>17d</sup>, and  
 -SO<sub>2</sub>-NR<sup>20d</sup>R<sup>17d</sup>;

25

R<sup>19d</sup> is selected from: hydroxy, C<sub>1</sub>-C<sub>10</sub> alkyloxy,  
 C<sub>3</sub>-C<sub>11</sub> cycloalkyloxy, aryloxy, aryl(C<sub>1</sub>-C<sub>6</sub> alkoxy)-, C<sub>3</sub>-C<sub>10</sub>  
 alkylcarbonyloxyalkyloxy, C<sub>3</sub>-C<sub>10</sub>  
 alkoxy carbonyloxyalkyloxy, C<sub>2</sub>-C<sub>10</sub> alkoxy carbonylalkyloxy,  
 30 C<sub>5</sub>-C<sub>10</sub> cycloalkylcarbonyloxyalkyloxy,  
 C<sub>5</sub>-C<sub>10</sub> cycloalkoxy carbonyloxyalkyloxy,  
 C<sub>5</sub>-C<sub>10</sub> cycloalkoxy carbonylalkyloxy,

C<sub>7</sub>-C<sub>11</sub> aryloxy carbonylalkyloxy,

C<sub>8</sub>-C<sub>12</sub> aryloxy carbonyloxyalkyloxy,

C<sub>8</sub>-C<sub>12</sub> aryl carbonyloxyalkyloxy,

5 C<sub>5</sub>-C<sub>10</sub> alkoxyalkyl carbonyloxyalkyloxy, C<sub>5</sub>-C<sub>10</sub> (5-alkyl-  
1,3-dioxo-cyclopenten-2-one-yl)methyloxy, C<sub>10</sub>-C<sub>14</sub> (5-aryl-  
1,3-dioxo-cyclopenten-2-one-yl)methyloxy, and  
(R<sup>11d</sup>) (R<sup>12d</sup>)N-(C<sub>1</sub>-C<sub>10</sub> alkoxy)-;

3  
β 10 R<sup>20d</sup> is selected from: H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>7</sub> cycloalkyl, C<sub>4</sub>-C<sub>11</sub>  
cycloalkylalkyl, aryl, aryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-, and  
heteroaryl(C<sub>1</sub>-C<sub>6</sub> alkyl)-;

R<sup>21d</sup> is selected from: COOH and NR<sup>6d</sup><sub>2</sub>;

m<sup>d</sup> is 0-4;

15 n<sup>d</sup> is 0-4;

t<sup>d</sup> is 0-4;

p<sup>d</sup> is 0-2;

q<sup>d</sup> is 0-2; and

r<sup>d</sup> is 0-2;

20

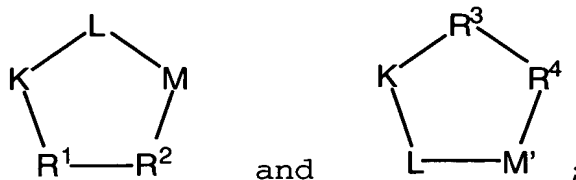
with the following provisos:

(1) t<sup>d</sup>, n<sup>d</sup>, m<sup>d</sup> and q<sup>d</sup> are chosen such that the number of atoms  
connecting R<sup>1d</sup> and Y<sup>d</sup> is in the range of 10-14; and

(2) n<sup>d</sup> and m<sup>d</sup> are chosen such that the value of n<sup>d</sup> plus m<sup>d</sup> is  
25 greater than one unless U<sup>d</sup> is

-(CH<sub>2</sub>)<sub>t</sub><sup>d</sup> Q<sup>d</sup> (CH<sub>2</sub>)<sub>m</sub><sup>d</sup> -;

or Q is a peptide selected from the group:



R<sup>1</sup> is L-valine, D-valine or L-lysine optionally substituted on the ε amino group with a bond to L<sub>n</sub>;

5

R<sup>2</sup> is L-phenylalanine, D-phenylalanine, D-1-naphthylalanine, 2-aminothiazole-4-acetic acid or tyrosine, the tyrosine optionally substituted on the hydroxy group with a bond to L<sub>n</sub>;

10

R<sup>3</sup> is D-valine;

R<sup>4</sup> is D-tyrosine substituted on the hydroxy group with a bond to L<sub>n</sub>;

15

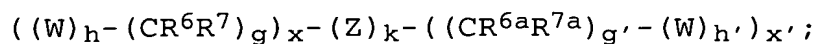
provided that one of R<sup>1</sup> and R<sup>2</sup> in each Q is substituted with a bond to L<sub>n</sub>, and further provided that when R<sup>2</sup> is 2-aminothiazole-4-acetic acid, K is N-methylarginine;

20 provided that at least one Q is a compound of Formula (Ia) or (Ib);

d is selected from 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;

25 d' is 1-100;

L<sub>n</sub> is a linking group having the formula:



W is independently selected at each occurrence from the group:

O, S, NH, NHC(=O), C(=O)NH, NR<sup>8</sup>C(=O), C(=O)N R<sup>8</sup>, C(=O),  
C(=O)O, OC(=O), NHC(=S)NH, NHC(=O)NH, SO<sub>2</sub>, SO<sub>2</sub>NH,  
(OCH<sub>2</sub>CH<sub>2</sub>)<sub>s</sub>, (CH<sub>2</sub>CH<sub>2</sub>O)<sub>s'</sub>, (OCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>)<sub>s''</sub>, (CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>O)<sub>t</sub>, and  
5 (aa)<sub>t'</sub>;

aa is independently at each occurrence an amino acid;

10 Z is selected from the group: aryl substituted with 0-3 R<sup>10</sup>,  
C<sub>3</sub>-10 cycloalkyl substituted with 0-3 R<sup>10</sup>, and a 5-10  
membered heterocyclic ring system containing 1-4  
heteroatoms independently selected from N, S, and O and  
substituted with 0-3 R<sup>10</sup>;

15 R<sup>6</sup>, R<sup>6a</sup>, R<sup>7</sup>, R<sup>7a</sup>, and R<sup>8</sup> are independently selected at each  
occurrence from the group: H, =O, COOH, SO<sub>3</sub>H, PO<sub>3</sub>H, C<sub>1</sub>-C<sub>5</sub>  
alkyl substituted with 0-3 R<sup>10</sup>, aryl substituted with 0-3  
R<sup>10</sup>, benzyl substituted with 0-3 R<sup>10</sup>, and C<sub>1</sub>-C<sub>5</sub> alkoxy  
substituted with 0-3 R<sup>10</sup>, NHC(=O)R<sup>11</sup>, C(=O)NHR<sup>11</sup>,  
20 NHC(=O)NHR<sup>11</sup>, NHR<sup>11</sup>, R<sup>11</sup>, and a bond to C<sub>H</sub>;

R<sup>10</sup> is independently selected at each occurrence from the  
group: a bond to C<sub>H</sub>, COOR<sup>11</sup>, C(=O)NHR<sup>11</sup>, NHC(=O)R<sup>11</sup>, OH,  
NHR<sup>11</sup>, SO<sub>3</sub>H, PO<sub>3</sub>H, -OPO<sub>3</sub>H<sub>2</sub>, -OSO<sub>3</sub>H, aryl substituted with  
25 0-3 R<sup>11</sup>, C<sub>1</sub>-5 alkyl substituted with 0-1 R<sup>12</sup>, C<sub>1</sub>-5 alkoxy  
substituted with 0-1 R<sup>12</sup>, and a 5-10 membered  
heterocyclic ring system containing 1-4 heteroatoms  
independently selected from N, S, and O and substituted  
with 0-3 R<sup>11</sup>;

30

R<sup>11</sup> is independently selected at each occurrence from the  
group: H, alkyl substituted with 0-1 R<sup>12</sup>, aryl



substituted with 0-1  $R^{12}$ , a 5-10 membered heterocyclic  
 ring system containing 1-4 heteroatoms independently  
 selected from N, S, and O and substituted with 0-1  $R^{12}$ ,  
 C<sub>3-10</sub> cycloalkyl substituted with 0-1  $R^{12}$ , polyalkylene  
 glycol substituted with 0-1  $R^{12}$ , carbohydrate substituted  
 with 0-1  $R^{12}$ , cyclodextrin substituted with 0-1  $R^{12}$ , amino  
 acid substituted with 0-1  $R^{12}$ , polycarboxyalkyl  
 substituted with 0-1  $R^{12}$ , polyazaalkyl substituted with  
 0-1  $R^{12}$ , and peptide substituted with 0-1  $R^{12}$ , wherein the  
 peptide is comprised of 2-10 amino acids, 3,6-O-disulfo-  
 B-D-galactopyranosyl, bis(phosphonomethyl)glycine, and a  
 bond to  $C_h$ ;

$R^{12}$  is a bond to  $C_h$ ;

15

k is selected from 0, 1, and 2;

h is selected from 0, 1, and 2;

h' is selected from 0, 1, and 2;

g is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;

20 

g' is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;

s is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;

s' is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;

s" is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;

t is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;

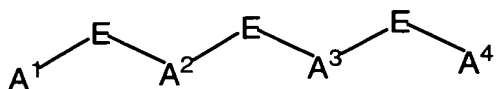
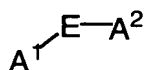
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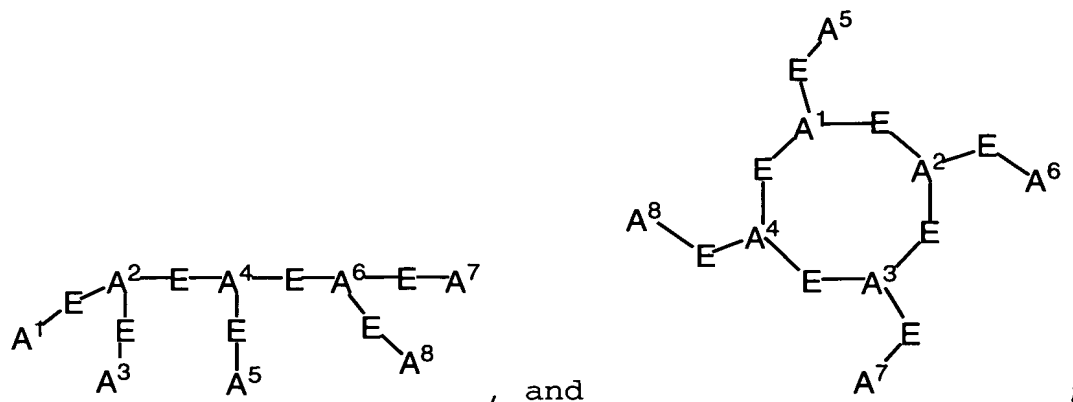
t' is selected from 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10;

x is selected from 0, 1, 2, 3, 4, and 5;

x' is selected from 0, 1, 2, 3, 4, and 5;

30  $C_h$  is a metal bonding unit having a formula selected from the group:





$A^1, A^2, A^3, A^4, A^5, A^6, A^7,$  and  $A^8$  are independently selected at each occurrence from the group:  $NR^{13}, NR^{13}R^{14}, S, SH, S(Pg), O, OH, PR^{13}, PR^{13}R^{14}, P(O)R^{15}R^{16}$ , and a bond to  $L_n$ ;

$E$  is a bond,  $CH$ , or a spacer group independently selected at each occurrence from the group:  $C_1$ - $C_{10}$  alkyl substituted with 0-3  $R^{17}$ , aryl substituted with 0-3  $R^{17}$ ,  $C_{3-10}$  cycloalkyl substituted with 0-3  $R^{17}$ , heterocyclo- $C_{1-10}$  alkyl substituted with 0-3  $R^{17}$ , wherein the heterocyclo group is a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from  $N, S,$  and  $O$ ,  $C_{6-10}$  aryl- $C_{1-10}$  alkyl substituted with 0-3  $R^{17}$ ,  $C_{1-10}$  alkyl- $C_{6-10}$  aryl- substituted with 0-3  $R^{17}$ , and a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from  $N, S,$  and  $O$  and substituted with 0-3  $R^{17}$ ;

$R^{13}$  and  $R^{14}$  are each independently selected from the group: a bond to  $L_n$ , hydrogen,  $C_1$ - $C_{10}$  alkyl substituted with 0-3  $R^{17}$ , aryl substituted with 0-3  $R^{17}$ ,  $C_{1-10}$  cycloalkyl substituted with 0-3  $R^{17}$ , heterocyclo- $C_{1-10}$  alkyl substituted with 0-3  $R^{17}$ , wherein the heterocyclo group

is a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O, C<sub>6-10</sub> aryl-C<sub>1-10</sub> alkyl substituted with 0-3 R<sup>17</sup>, C<sub>1-10</sub> alkyl-C<sub>6-10</sub> aryl- substituted with 0-3 R<sup>17</sup>, a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O and substituted with 0-3 R<sup>17</sup>, and an electron, provided that when one of R<sup>13</sup> or R<sup>14</sup> is an electron, then the other is also an electron;

10

alternatively, R<sup>13</sup> and R<sup>14</sup> combine to form =C(R<sup>20</sup>)(R<sup>21</sup>);

15

R<sup>15</sup> and R<sup>16</sup> are each independently selected from the group: a bond to L<sub>n</sub>, -OH, C<sub>1-C10</sub> alkyl substituted with 0-3 R<sup>17</sup>, C<sub>1-C10</sub> alkyl substituted with 0-3 R<sup>17</sup>, aryl substituted with 0-3 R<sup>17</sup>, C<sub>3-10</sub> cycloalkyl substituted with 0-3 R<sup>17</sup>, heterocyclo-C<sub>1-10</sub> alkyl substituted with 0-3 R<sup>17</sup>, wherein the heterocyclo group is a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O, C<sub>6-10</sub> aryl-C<sub>1-10</sub> alkyl substituted with 0-3 R<sup>17</sup>, C<sub>1-10</sub> alkyl-C<sub>6-10</sub> aryl- substituted with 0-3 R<sup>17</sup>, and a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O and substituted with 0-3 R<sup>17</sup>;

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25

R<sup>17</sup> is independently selected at each occurrence from the group: a bond to L<sub>n</sub>, =O, F, Cl, Br, I, -CF<sub>3</sub>, -CN, -CO<sub>2</sub>R<sup>18</sup>, -C(=O)R<sup>18</sup>, -C(=O)N(R<sup>18</sup>)<sub>2</sub>, -CHO, -CH<sub>2</sub>OR<sup>18</sup>, -OC(=O)R<sup>18</sup>, -OC(=O)OR<sup>18a</sup>, -OR<sup>18</sup>, -OC(=O)N(R<sup>18</sup>)<sub>2</sub>, -NR<sup>19</sup>C(=O)R<sup>18</sup>, -NR<sup>19</sup>C(=O)OR<sup>18a</sup>, -NR<sup>19</sup>C(=O)N(R<sup>18</sup>)<sub>2</sub>,

30

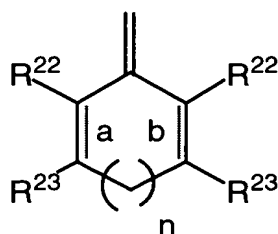
$\text{-NR}^{19}\text{SO}_2\text{N(R}^{18})_2$ ,  $\text{-NR}^{19}\text{SO}_2\text{R}^{18a}$ ,  $\text{-SO}_3\text{H}$ ,  $\text{-SO}_2\text{R}^{18a}$ ,  $\text{-SR}^{18}$ ,  
 $\text{-S(=O)R}^{18a}$ ,  $\text{-SO}_2\text{N(R}^{18})_2$ ,  $\text{-N(R}^{18})_2$ ,  $\text{-NHC(=S)NHR}^{18}$ ,  $\text{=NOR}^{18}$ ,  
 $\text{NO}_2$ ,  $\text{-C(=O)NHR}^{18}$ ,  $\text{-C(=O)NHN(R}^{18})\text{R}^{18a}$ ,  $\text{-OCH}_2\text{CO}_2\text{H}$ ,  
 2-(1-morpholino)ethoxy,  $\text{C}_1\text{-C}_5$  alkyl,  $\text{C}_2\text{-C}_4$  alkenyl,  $\text{C}_3\text{-C}_6$   
 cycloalkyl,  $\text{C}_3\text{-C}_6$  cycloalkylmethyl,  $\text{C}_2\text{-C}_6$  alkoxyalkyl,  
 aryl substituted with 0-2  $\text{R}^{18}$ , and a 5-10 membered  
 heterocyclic ring system containing 1-4 heteroatoms  
 independently selected from N, S, and O;

$\text{R}^{18}$ ,  $\text{R}^{18a}$ , and  $\text{R}^{19}$  are independently selected at each  
 occurrence from the group: a bond to  $\text{L}_n$ , H,  $\text{C}_1\text{-C}_6$  alkyl,  
 phenyl, benzyl,  $\text{C}_1\text{-C}_6$  alkoxy, halide, nitro, cyano, and  
 trifluoromethyl;

$\text{Pg}$  is a thiol protecting group;

$\text{R}^{20}$  and  $\text{R}^{21}$  are independently selected from the group: H,  
 $\text{C}_1\text{-C}_{10}$  alkyl,  $\text{-CN}$ ,  $\text{-CO}_2\text{R}^{25}$ ,  $\text{-C(=O)R}^{25}$ ,  $\text{-C(=O)N(R}^{25})_2$ ,  
 $\text{C}_2\text{-C}_{10}$  1-alkene substituted with 0-3  $\text{R}^{23}$ ,  $\text{C}_2\text{-C}_{10}$  1-alkyne  
 substituted with 0-3  $\text{R}^{23}$ , aryl substituted with 0-3  $\text{R}^{23}$ ,  
 unsaturated 5-10 membered heterocyclic ring system  
 containing 1-4 heteroatoms independently selected from N,  
 S, and O and substituted with 0-3  $\text{R}^{23}$ , and unsaturated  
 $\text{C}_3\text{-C}_{10}$  carbocycle substituted with 0-3  $\text{R}^{23}$ ;

alternatively,  $\text{R}^{20}$  and  $\text{R}^{21}$ , taken together with the divalent  
 carbon radical to which they are attached form:



$R^{22}$  and  $R^{23}$  are independently selected from the group: H,  $R^{24}$ , C<sub>1</sub>-C<sub>10</sub> alkyl substituted with 0-3  $R^{24}$ , C<sub>2</sub>-C<sub>10</sub> alkenyl substituted with 0-3  $R^{24}$ , C<sub>2</sub>-C<sub>10</sub> alkynyl substituted with 0-3  $R^{24}$ , aryl substituted with 0-3  $R^{24}$ , a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O and substituted with 0-3  $R^{24}$ , and C<sub>3-10</sub> carbocycle substituted with 0-3  $R^{24}$ ;

alternatively,  $R^{22}$ ,  $R^{23}$  taken together form a fused aromatic or a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O;

**a** and **b** indicate the positions of optional double bonds and **n** is 0 or 1;

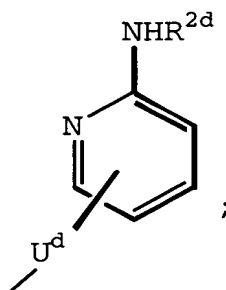
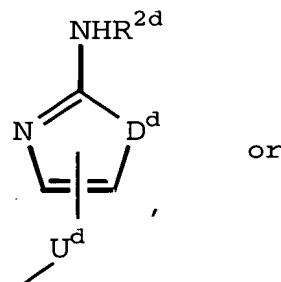
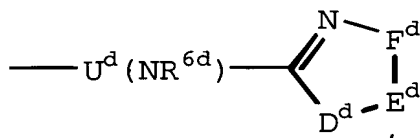
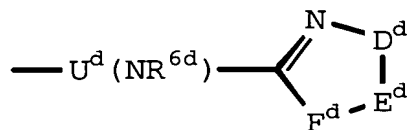
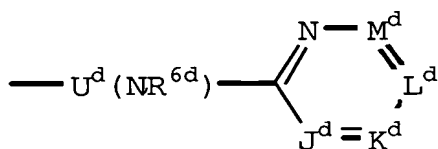
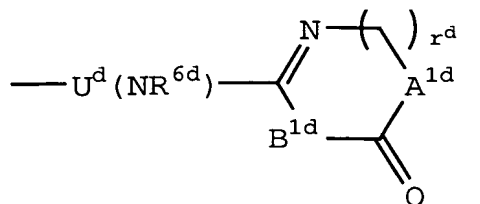
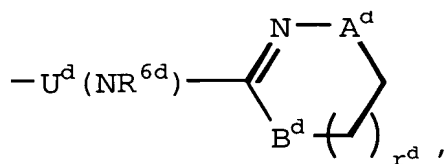
$R^{24}$  is independently selected at each occurrence from the

group: =O, F, Cl, Br, I, -CF<sub>3</sub>, -CN, -CO<sub>2</sub>R<sup>25</sup>, -C(=O)R<sup>25</sup>, -C(=O)N(R<sup>25</sup>)<sub>2</sub>, -N(R<sup>25</sup>)<sub>3</sub><sup>+</sup>, -CH<sub>2</sub>OR<sup>25</sup>, -OC(=O)R<sup>25</sup>, -OC(=O)OR<sup>25a</sup>, -OR<sup>25</sup>, -OC(=O)N(R<sup>25</sup>)<sub>2</sub>, -NR<sup>26</sup>C(=O)R<sup>25</sup>, -NR<sup>26</sup>C(=O)OR<sup>25a</sup>, -NR<sup>26</sup>C(=O)N(R<sup>25</sup>)<sub>2</sub>, -NR<sup>26</sup>SO<sub>2</sub>N(R<sup>25</sup>)<sub>2</sub>, -NR<sup>26</sup>SO<sub>2</sub>R<sup>25a</sup>, -SO<sub>3</sub>H, -SO<sub>2</sub>R<sup>25a</sup>, -SR<sup>25</sup>, -S(=O)R<sup>25a</sup>, -SO<sub>2</sub>N(R<sup>25</sup>)<sub>2</sub>, -N(R<sup>25</sup>)<sub>2</sub>, =NOR<sup>25</sup>, -C(=O)NHOR<sup>25</sup>, -OCH<sub>2</sub>CO<sub>2</sub>H, and 2-(1-morpholino)ethoxy; and,

R<sup>25</sup>, R<sup>25a</sup>, and R<sup>26</sup> are each independently selected at each occurrence from the group: hydrogen and C<sub>1</sub>-C<sub>6</sub> alkyl.

96. (New) A method according to claim 95, wherein:

5 R<sup>1de</sup> is selected from:



A<sup>d</sup> and B<sup>d</sup> are independently -CH<sub>2</sub>-, -O-, -N(R<sup>2d</sup>)-, or -C(=O)-;

10

A<sup>1d</sup> and B<sup>1d</sup> are independently -CH<sub>2</sub>- or -N(R<sup>3d</sup>)-;

$D^d$  is  $-N(R^{2d})-$ ,  $-O-$ ,  $-S-$ ,  $-C(=O)-$  or  $-SO_2-$ ;

$E^d-F^d$  is  $-C(R^{4d})=C(R^{5d})-$ ,  $-N=C(R^{4d})-$ ,  $-C(R^{4d})=N-$ , or  $-C(R^{4d})_2C(R^{5d})_2-$ ;

5

$J^d$ ,  $K^d$ ,  $L^d$  and  $M^d$  are independently selected from:  $C(R^{4d})-$ ,  $-C(R^{5d})-$  and  $-N-$ , provided that at least one of  $J^d$ ,  $K^d$ ,  $L^d$  and  $M^d$  is not  $-N-$ ;

10  $R^{2d}$  is selected from: H,  $C_1-C_6$  alkyl,  $(C_1-C_6$  alkyl)carbonyl,  $(C_1-C_6$  alkoxy)carbonyl,  $C_1-C_6$  alkylaminocarbonyl,  $C_3-C_6$  alkenyl,  $C_3-C_7$  cycloalkyl,  $C_4-C_{11}$  cycloalkylalkyl, aryl, heteroaryl( $C_1-C_6$  alkyl)carbonyl, heteroarylcarbonyl, aryl( $C_1-C_6$  alkyl)-,  $(C_1-C_6$  alkyl)carbonyl, arylcarbonyl, 15 alkylsulfonyl, arylsulfonyl, aryl( $C_1-C_6$  alkyl)sulfonyl, heteroarylsulfonyl, heteroaryl( $C_1-C_6$  alkyl)sulfonyl, aryloxy carbonyl, and aryl( $C_1-C_6$  alkoxy)carbonyl, wherein said aryl groups are substituted with 0-2 substituents selected from the group consisting of  $C_1-C_4$  alkyl,  $C_1-C_4$  20 alkoxy, halo,  $CF_3$ , and nitro;

$R^{3d}$  is selected from: H,  $C_1-C_6$  alkyl,  $C_3-C_7$  cycloalkyl,  $C_4-C_{11}$  cycloalkylalkyl, aryl, aryl( $C_1-C_6$  alkyl)-, and heteroaryl( $C_1-C_6$  alkyl)-;

25

$R^{4d}$  and  $R^{5d}$  are independently selected from: H,  $C_1-C_4$  alkoxy,  $NR^{2d}R^{3d}$ , halogen,  $NO_2$ , CN,  $CF_3$ ,  $C_1-C_6$  alkyl,  $C_3-C_6$  alkenyl,  $C_3-C_7$  cycloalkyl,  $C_4-C_{11}$  cycloalkylalkyl, aryl, aryl( $C_1-C_6$  alkyl)-,  $C_2-C_7$  alkylcarbonyl, and arylcarbonyl;

30

alternatively, when substituents on adjacent atoms,  $R^{4d}$  and  $R^{5d}$  can be taken together with the carbon atoms to which they are attached to form a 5-7 membered carbocyclic or 5-7 membered heterocyclic aromatic or non-aromatic ring system, said carbocyclic or heterocyclic ring being optionally substituted with 0-2 groups selected from:  $C_1$ - $C_4$  alkyl,  $C_1$ - $C_4$  alkoxy, halo, cyano, amino,  $CF_3$ , or  $NO_2$ ;

$U^d$  is selected from:

- $-(CH_2)_n^d-$ ,  
 10  $-(CH_2)_n^d (CR^{7d}=CR^{8d}) (CH_2)_m^d-$ ,  
 $-(CH_2)_t^d Q^d (CH_2)_m^d-$ ,  
 $-(CH_2)_n^d O (CH_2)_m^d-$ ,  
 $-(CH_2)_n^d N(R^{6d}) (CH_2)_m^d-$ ,  
 $-(CH_2)_n^d C(=O) (CH_2)_m^d-$ , and  
 15  $-(CH_2)_n^d S(O)_p^d (CH_2)_m^d-$ ;

wherein one or more of the methylene groups in  $U^d$  is optionally substituted with  $R^{7d}$ ;

- 20  $Q^d$  is selected from 1,2-phenylene, 1,3-phenylene, 2,3-pyridinylene, 3,4-pyridinylene, and 2,4-pyridinylene;

$R^{6d}$  is selected from: H,  $C_1$ - $C_4$  alkyl, and benzyl;

- 25  $R^{7d}$  and  $R^{8d}$  are independently selected from: H,  $C_1$ - $C_6$  alkyl,  $C_3$ - $C_7$  cycloalkyl,  $C_4$ - $C_{11}$  cycloalkylalkyl, aryl, aryl( $C_1$ - $C_6$  alkyl)-, and heteroaryl( $C_0$ - $C_6$  alkyl)-;



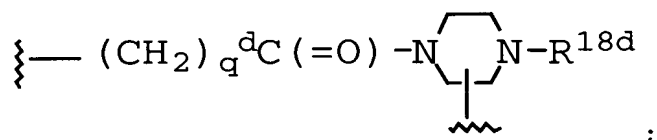
$W^d$  is  $-C(=O)-N(R^{13d})-(C(R^{12d})_2)_q^d-$ ;

$X^d$  is  $-C(R^{12d})(R^{14d})-C(R^{12d})(R^{15d})-$ ;

5

alternatively,  $W^d$  and  $X^d$  can be taken together to be

$\beta^3$

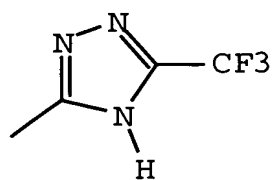
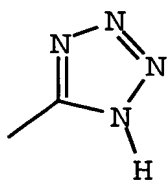


10  $R^{12d}$  is H or  $C_1-C_6$  alkyl;

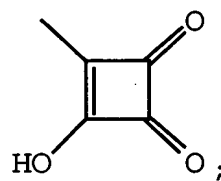
$Y^d$  is selected from:

$-COR^{19d}$ ,  $-SO_3H$ ,

15



, and



$d$  is selected from 1, 2, 3, 4, and 5;

20  $d'$  is 1-50;

$W$  is independently selected at each occurrence from the group:

$O$ ,  $NH$ ,  $NHC(=O)$ ,  $C(=O)NH$ ,  $NR^8C(=O)$ ,  $C(=O)NR^8$ ,  $C(=O)$ ,  
 $C(=O)O$ ,  $OC(=O)$ ,  $NHC(=S)NH$ ,  $NHC(=O)NH$ ,  $SO_2$ ,  $(OCH_2CH_2)_s$ ,

25

$(CH_2CH_2O)_{s'}$ ,  $(OCH_2CH_2CH_2)_{s''}$ ,  $(CH_2CH_2CH_2O)_t$ , and  $(aa)_t$ ;

$aa$  is independently at each occurrence an amino acid;

Z is selected from the group: aryl substituted with 0-1  $R^{10}$ ,  
C<sub>3-10</sub> cycloalkyl substituted with 0-1  $R^{10}$ , and a 5-10  
membered heterocyclic ring system containing 1-4  
heteroatoms independently selected from N, S, and O and  
substituted with 0-1  $R^{10}$ ;

$R^6$ ,  $R^{6a}$ ,  $R^7$ ,  $R^{7a}$ , and  $R^8$  are independently selected at each  
occurrence from the group: H, =O, COOH, SO<sub>3</sub>H, C<sub>1</sub>-C<sub>5</sub> alkyl  
substituted with 0-1  $R^{10}$ , aryl substituted with 0-1  $R^{10}$ ,  
benzyl substituted with 0-1  $R^{10}$ , and C<sub>1</sub>-C<sub>5</sub> alkoxy  
substituted with 0-1  $R^{10}$ , NHC(=O) $R^{11}$ , C(=O)NHR<sup>11</sup>,  
NHC(=O)NHR<sup>11</sup>, NHR<sup>11</sup>,  $R^{11}$ , and a bond to C<sub>H</sub>;

k is 0 or 1;  
s is selected from 0, 1, 2, 3, 4, and 5;  
s' is selected from 0, 1, 2, 3, 4, and 5;  
s'' is selected from 0, 1, 2, 3, 4, and 5;  
t is selected from 0, 1, 2, 3, 4, and 5;

$A^1$ ,  $A^2$ ,  $A^3$ ,  $A^4$ ,  $A^5$ ,  $A^6$ ,  $A^7$ , and  $A^8$  are independently selected at  
each occurrence from the group: NR<sup>13</sup>, NR<sup>13</sup>R<sup>14</sup>, S, SH,  
S(Pg), OH, and a bond to L<sub>n</sub>;

E is a bond, CH, or a spacer group independently selected at  
each occurrence from the group: C<sub>1</sub>-C<sub>10</sub> alkyl substituted  
with 0-3  $R^{17}$ , aryl substituted with 0-3  $R^{17}$ , C<sub>3-10</sub>  
cycloalkyl substituted with 0-3  $R^{17}$ , and a 5-10 membered  
heterocyclic ring system containing 1-4 heteroatoms  
independently selected from N, S, and O and substituted  
with 0-3  $R^{17}$ ;

$R^{13}$  and  $R^{14}$  are each independently selected from the group: a bond to  $L_n$ , hydrogen,  $C_1$ - $C_{10}$  alkyl substituted with 0-3  $R^{17}$ , aryl substituted with 0-3  $R^{17}$ , a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O and substituted with 0-3  $R^{17}$ , and an electron, provided that when one of  $R^{13}$  or  $R^{14}$  is an electron, then the other is also an electron;

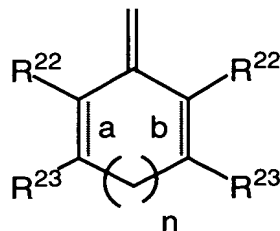
alternatively,  $R^{13}$  and  $R^{14}$  combine to form  $=C(R^{20})(R^{21})$ ;

$R^{17}$  is independently selected at each occurrence from the group: a bond to  $L_n$ ,  $=O$ , F, Cl, Br, I,  $-CF_3$ ,  $-CN$ ,  $-CO_2R^{18}$ ,  $-C(=O)R^{18}$ ,  $-C(=O)N(R^{18})_2$ ,  $-CH_2OR^{18}$ ,  $-OC(=O)R^{18}$ ,  $-OC(=O)OR^{18a}$ ,  $-OR^{18}$ ,  $-OC(=O)N(R^{18})_2$ ,  $-NR^{19}C(=O)R^{18}$ ,  $-NR^{19}C(=O)OR^{18a}$ ,  $-NR^{19}C(=O)N(R^{18})_2$ ,  $-NR^{19}SO_2N(R^{18})_2$ ,  $-NR^{19}SO_2R^{18a}$ ,  $-SO_3H$ ,  $-SO_2R^{18a}$ ,  $-S(=O)R^{18a}$ ,  $-SO_2N(R^{18})_2$ ,  $-N(R^{18})_2$ ,  $-NHC(=S)NHR^{18}$ ,  $=NOR^{18}$ ,  $-C(=O)NHN(R^{18})R^{18a}$ ,  $-OCH_2CO_2H$ , and 2-(1-morpholino)ethoxy;

$R^{18}$ ,  $R^{18a}$ , and  $R^{19}$  are independently selected at each occurrence from the group: a bond to  $L_n$ , H, and  $C_1$ - $C_6$  alkyl;

$R^{20}$  and  $R^{21}$  are independently selected from the group: H,  $C_1$ - $C_5$  alkyl,  $-CO_2R^{25}$ ,  $C_2$ - $C_5$  1-alkene substituted with 0-3  $R^{23}$ ,  $C_2$ - $C_5$  1-alkyne substituted with 0-3  $R^{23}$ , aryl substituted with 0-3  $R^{23}$ , and unsaturated 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O and substituted with 0-3  $R^{23}$ ;

alternatively,  $R^{20}$  and  $R^{21}$ , taken together with the divalent carbon radical to which they are attached form:



$R^{22}$  and  $R^{23}$  are independently selected from the group: H, and  $R^{24}$ ;

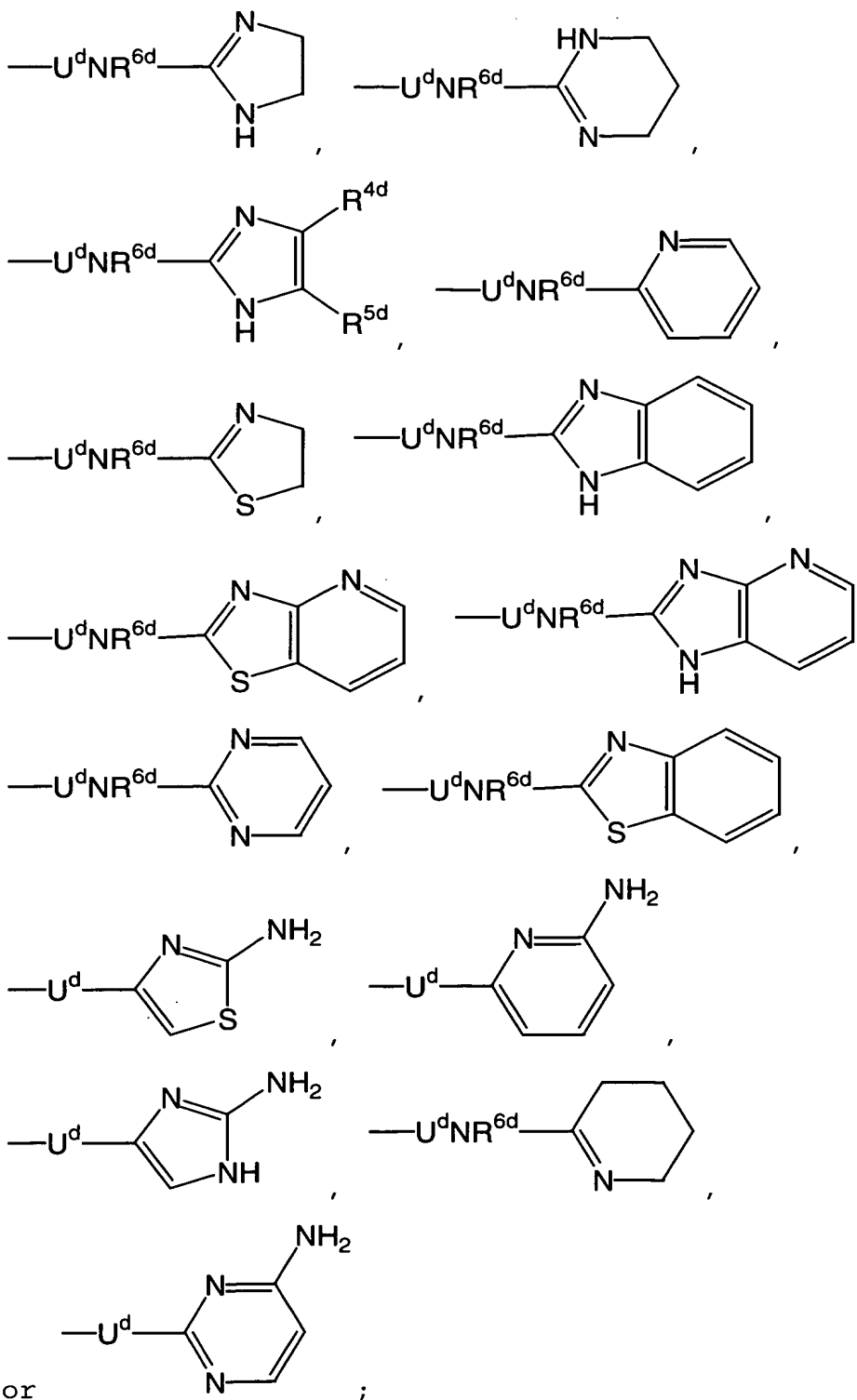
alternatively,  $R^{22}$ ,  $R^{23}$  taken together form a fused aromatic or a 5-10 membered heterocyclic ring system containing 1-4 heteroatoms independently selected from N, S, and O;

$R^{24}$  is independently selected at each occurrence from the group:  $-\text{CO}_2R^{25}$ ,  $-\text{C}(=\text{O})\text{N}(R^{25})_2$ ,  $-\text{CH}_2\text{OR}^{25}$ ,  $-\text{OC}(=\text{O})R^{25}$ ,  $-\text{OR}^{25}$ ,  $-\text{SO}_3\text{H}$ ,  $-\text{N}(R^{25})_2$ , and  $-\text{OCH}_2\text{CO}_2\text{H}$ ; and,

$R^{25}$  is independently selected at each occurrence from the group: H and  $\text{C}_1\text{-C}_3$  alkyl.

97. (New) A method according to claim 95, wherein:

R<sup>1de</sup> is selected from:



10 or

wherein the above heterocycles are optionally substituted with  
 0-2 substituents selected from the group:  $\text{NH}_2$ , halogen,  
 $\text{NO}_2$ ,  $\text{CN}$ ,  $\text{CF}_3$ ,  $\text{C}_1\text{-C}_4$  alkoxy,  $\text{C}_1\text{-C}_6$  alkyl, and  $\text{C}_3\text{-C}_7$   
 cycloalkyl;

5

$\text{U}^{\text{d}}$  is  $-(\text{CH}_2)_n-$ ,  $-(\text{CH}_2)_t\text{Q}^{\text{d}}(\text{CH}_2)_m-$  or  $-\text{C}(=\text{O})(\text{CH}_2)_n-$ , wherein  
 one of the methylene groups is optionally substituted  
 with  $\text{R}^{7\text{d}}$ ;

$\beta^3$  10  $\text{R}^{7\text{d}}$  is selected from:  $\text{C}_1\text{-C}_6$  alkyl,  $\text{C}_3\text{-C}_7$  cycloalkyl,  $\text{C}_4\text{-C}_{11}$   
 cycloalkylalkyl, aryl, aryl( $\text{C}_1\text{-C}_6$  alkyl), heteroaryl, and  
 heteroaryl( $\text{C}_1\text{-C}_6$  alkyl);

15  $\text{R}^{10\text{d}}$  is selected from:  $\text{H}$ ,  $\text{R}^{1\text{de}}$ ,  $\text{C}_1\text{-C}_4$  alkoxy substituted with  
 0-1  $\text{R}^{21\text{d}}$ , halogen,  $\text{CO}_2\text{R}^{17\text{d}}$ ,  $\text{CONR}^{17\text{d}}\text{R}^{20\text{d}}$ ,  $\text{C}_1\text{-C}_6$  alkyl  
 substituted with 0-1  $\text{R}^{15\text{d}}$  or 0-1  $\text{R}^{21\text{d}}$ ,  $\text{C}_3\text{-C}_7$  cycloalkyl  
 substituted with 0-1  $\text{R}^{15\text{d}}$  or 0-1  $\text{R}^{21\text{d}}$ ,  $\text{C}_4\text{-C}_{11}$   
 cycloalkylalkyl substituted with 0-1  $\text{R}^{15\text{d}}$  or 0-1  $\text{R}^{21\text{d}}$ , and  
 aryl( $\text{C}_1\text{-C}_6$  alkyl)- substituted with 0-1  $\text{R}^{15\text{d}}$  or 0-2  $\text{R}^{11\text{d}}$  or  
 20 0-1  $\text{R}^{21\text{d}}$ ;

$\text{R}^{10\text{de}}$  is selected from:  $\text{H}$ ,  $\text{C}_1\text{-C}_4$  alkoxy substituted with 0-1  
 $\text{R}^{21\text{d}}$ , halogen,  $\text{CO}_2\text{R}^{17\text{d}}$ ,  $\text{CONR}^{17\text{d}}\text{R}^{20\text{d}}$ ,  $\text{C}_1\text{-C}_6$  alkyl  
 substituted with 0-1  $\text{R}^{15\text{d}}$  or 0-1  $\text{R}^{21\text{d}}$ ,  $\text{C}_3\text{-C}_7$  cycloalkyl  
 25 substituted with 0-1  $\text{R}^{15\text{d}}$  or 0-1  $\text{R}^{21\text{d}}$ ,  $\text{C}_4\text{-C}_{11}$   
 cycloalkylalkyl substituted with 0-1  $\text{R}^{15\text{d}}$  or 0-1  $\text{R}^{21\text{d}}$ , and  
 aryl( $\text{C}_1\text{-C}_6$  alkyl)- substituted with 0-1  $\text{R}^{15\text{d}}$  or 0-2  $\text{R}^{11\text{d}}$  or  
 0-1  $\text{R}^{21\text{d}}$ ;

30  $\text{W}^{\text{d}}$  is  $-\text{C}(=\text{O})-\text{N}(\text{R}^{13\text{d}})-$ ;

$X^d$  is  $-\text{CH}(\text{R}^{14d})-\text{CH}(\text{R}^{15d})-$ ;

$\text{R}^{13d}$  is H or  $\text{CH}_3$ ;

5  $\text{R}^{14d}$  is selected from:

H,  $\text{C}_1$ - $\text{C}_{10}$  alkyl, aryl, or heteroaryl, wherein said aryl or heteroaryl groups are optionally substituted with 0-3 substituents selected from the group consisting of:  $\text{C}_1$ - $\text{C}_4$  alkyl,  $\text{C}_1$ - $\text{C}_4$  alkoxy, aryl, halo, cyano, amino,  $\text{CF}_3$ , and  $\text{NO}_2$ ;

$\text{R}^{15d}$  is H or  $\text{R}^{16d}$ ;

$Y^d$  is  $-\text{COR}^{19d}$ ;

15

$\text{R}^{19d}$  is selected from:

hydroxy,  $\text{C}_1$ - $\text{C}_{10}$  alkoxy,

methylcarbonyloxymethoxy-,

ethylcarbonyloxymethoxy-,

20 *t*-butylcarbonyloxymethoxy-,

cyclohexylcarbonyloxymethoxy-,

1-(methylcarbonyloxy)ethoxy-,

1-(ethylcarbonyloxy)ethoxy-,

1-(*t*-butylcarbonyloxy)ethoxy-,

25 1-(cyclohexylcarbonyloxy)ethoxy-,

*i*-propyloxy carbonyloxymethoxy-,

*t*-butyloxy carbonyloxymethoxy-,

1-(*i*-propyloxy carbonyloxy)ethoxy-,

1-(cyclohexyloxy carbonyloxy)ethoxy-,

30 1-(*t*-butyloxy carbonyloxy)ethoxy-,

dimethylaminoethoxy-,

diethylaminoethoxy-,

(5-methyl-1,3-dioxacyclopenten-2-on-4-yl)methoxy-,  
 (5-(t-butyl)-1,3-dioxacyclopenten-2-on-4-yl)methoxy-,  
 (1,3-dioxa-5-phenyl-cyclopenten-2-on-4-yl)methoxy-, and  
 1-(2-(2-methoxypropyl)carbonyloxy)ethoxy-;

5

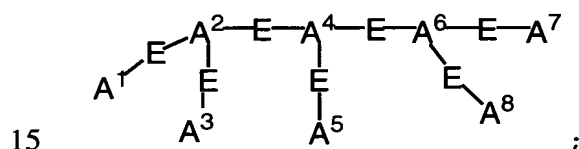
$R^{20d}$  is H or  $CH_3$ ;

$m^d$  is 0 or 1;

$n^d$  is 1-4;

10  $t^d$  is 0 or 1;

$C_h$  is



$A^1$  is selected from the group: OH, and a bond to  $L_n$ ;

$A^2$ ,  $A^4$ , and  $A^6$  are each N;

20

$A^3$ ,  $A^5$ , and  $A^8$  are each OH;

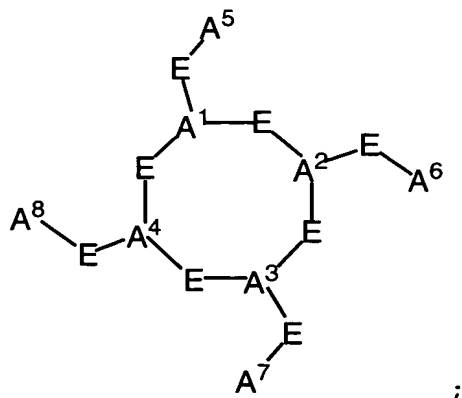
$A^7$  is a bond to  $L_n$  or NH-bond to  $L_n$ ;

25 E is a  $C_2$  alkyl substituted with 0-1  $R^{17}$ ;

$R^{17}$  is =O;

alternatively,  $C_h$  is





5. A<sup>1</sup> is selected from the group: OH and a bond to L<sub>n</sub>;

A<sup>2</sup>, A<sup>3</sup> and A<sup>4</sup> are each N;

A<sup>5</sup>, A<sup>6</sup> and A<sup>8</sup> are each OH;

10

A<sup>7</sup> is a bond to L<sub>n</sub>;

E is a C<sub>2</sub> alkyl substituted with 0-1 R<sup>17</sup>;

15 R<sup>17</sup> is =O;

alternatively, C<sub>h</sub> is  $\text{A}^1 \text{---} \text{E} \text{---} \text{A}^2$ ;

A<sup>1</sup> is NH<sub>2</sub> or N=C(R<sup>20</sup>)(R<sup>21</sup>);

20 E is a bond;

A<sup>2</sup> is NHR<sup>13</sup>;

25 R<sup>13</sup> is a heterocycle substituted with R<sup>17</sup>, the heterocycle being selected from pyridine and pyrimidine;

$R^{17}$  is selected from a bond to  $L_n$ ,  $C(=O)NHR^{18}$  and  $C(=O)R^{18}$ ;

$R^{18}$  is a bond to  $L_n$ ;

5

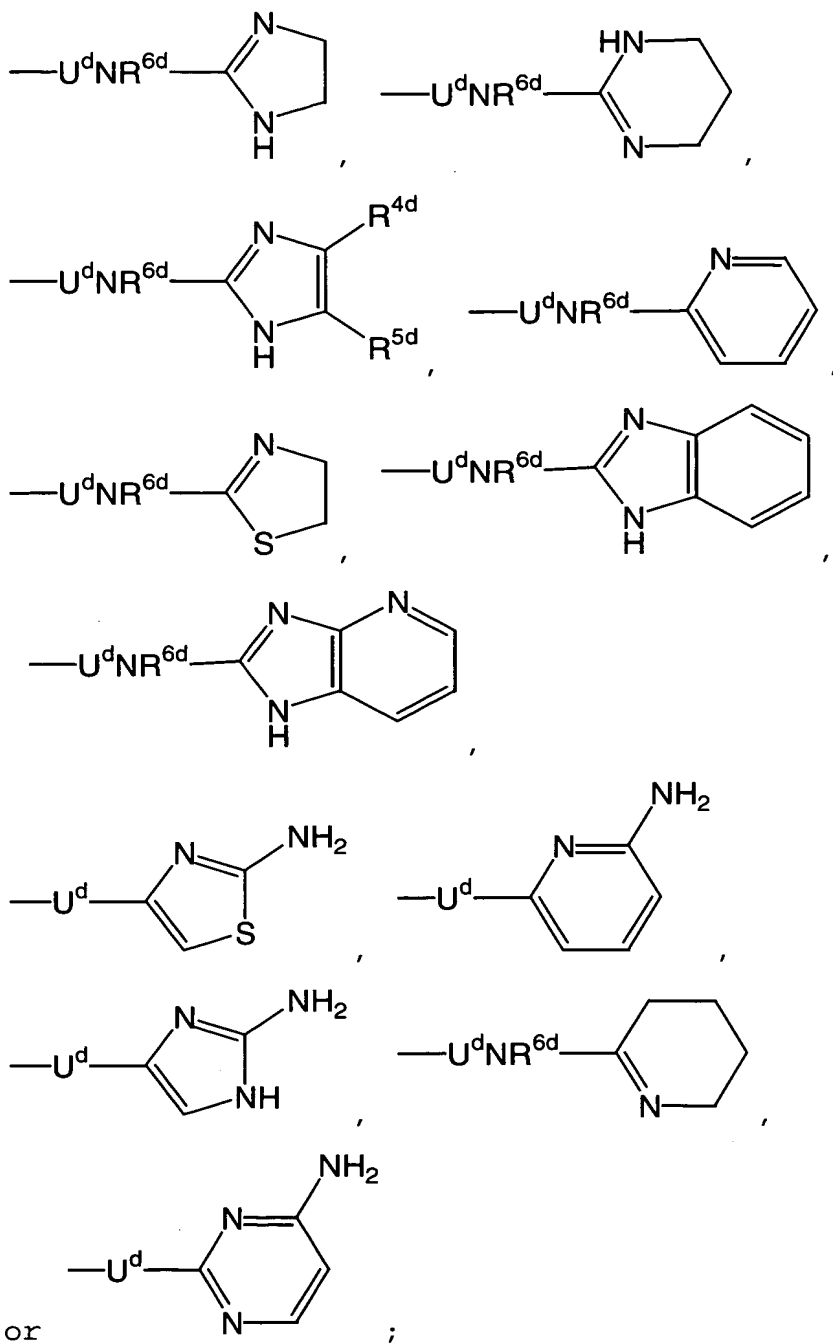
$R^{24}$  is selected from the group:  $-CO_2R^{25}$ ,  $-OR^{25}$ ,  $-SO_3H$ , and  $-N(R^{25})_2$ ; and,

10

$R^{25}$  is independently selected at each occurrence from the group: hydrogen and methyl.

98. (New) A method according to Claim 95, wherein

R<sup>1de</sup> is selected from:



or

wherein the above heterocycles are optionally substituted with 0-2 substituents selected from the group: NH<sub>2</sub>, halogen, NO<sub>2</sub>, CN, CF<sub>3</sub>, C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>6</sub> alkyl, and C<sub>3</sub>-C<sub>7</sub> cycloalkyl.

99. (New) A method of treating cancer according to claim 68 wherein the compound is selected from the group consisting of:

5 2-(((4-(4-(((3-(2-(2-(3-((6-((1-aza-2-(2-sulfophenyl)vinyl)amino)(3-pyridyl))carbonylamino)propoxy)-ethoxy)ethoxy)propyl)amino)sulfonyl)-phenyl)phenyl)sulfonyl)amino)-3-((1-(3-(imidazole-2-ylamino)propyl)(1H-indazol-5-yl))carbonylamino)propanoic acid;

15 2-(2-aza-2-((5-(N-(1,3-bis(3-(2-(2-(3-(((4-(4-(((1-carboxy-2-((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))-carbonylamino)ethyl)amino)sulfonyl)-phenyl)phenyl)sulfonyl)amino)propoxy)-ethoxy)ethoxy)propyl)carbamoyl)propyl)carbamoyl)(2-pyridyl))amino)vinyl)benzenesulfonic acid;

20 2-((6-((1-aza-2-(sulfophenyl)vinyl)amino)(3-pyridyl))carbonylamino)-4-(N-(3-(2-(2-(3-(((4-(4-(((1-carboxy-2-((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonylamino)ethyl)amino)sulfonyl)-phenyl)phenyl)sulfonyl)amino)propoxy)-ethoxy)ethoxy)propyl)carbamoyl)butanoic acid;

30 3-((1-(3-(imidazole-2-ylamino)propyl)(1H-indazol-5-yl))carbonylamino)-2-(((4-(4-(((3-(2-(2-(3-(2-(1,4,7,10-tetraaza-4,7,10-tris(carboxymethyl)cyclododecyl)-acetylamino)propoxy)ethoxy)ethoxy)propyl)amino)sulfonyl)-phenyl)phenyl)sulfonyl)amino)propanoic acid;

2-(6-((6-((1-aza-2-(2-sulfophenyl)vinyl)-amino)(3-pyridyl))carbonylamino)hexanoylamino)-3-((1-(3-(imidazol-

2-ylamino)propyl)(1H-indazol-5-yl))carbonylamino)-  
propanoic acid;

5 2-((6-((1-aza-2-(2-sulfophenyl)vinyl)-amino)(3-  
pyridyl))carbonylamino)-3-((1-(3-(imidazol-2-  
ylamino)propyl)(1H-indazol-5-yl))carbonylamino)propanoic  
acid;

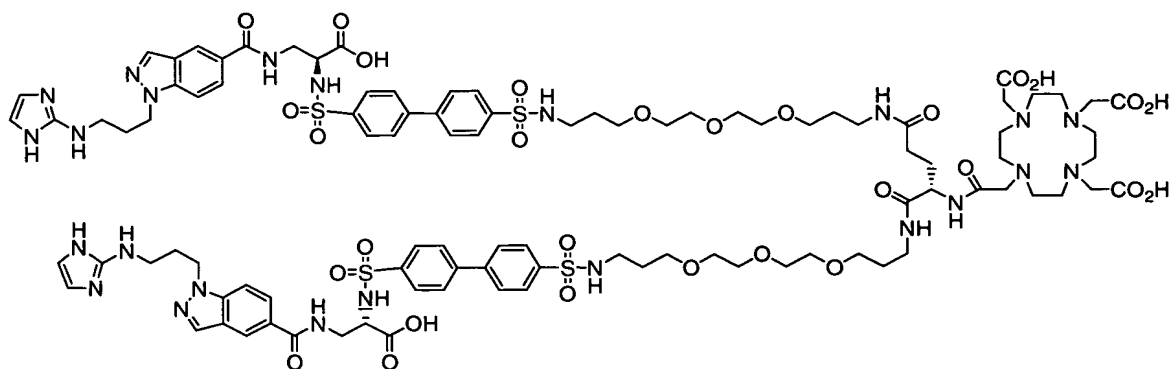
10 [2-[[[5-[carbonyl]-2-pyridinyl]hydrazono]methyl]-  
benzenesulfonic acid]-Glu(2-(6-aminohexanoylamino)-3-((1-  
3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonyl-  
amino)propanoic acid)(2-(6-aminohexanoylamino)-3-((1-(3-  
imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonyl-  
amino)propanoic acid);

15 [2-[[[5-[carbonyl]-2-pyridinyl]hydrazono]methyl]-  
benzenesulfonic acid]-Glu-bis-[Glu(2-(6-  
Amino hexanoylamino)-3-((1-(3-(imidazol-2-  
ylamino)propyl)(1H-indazol-5-yl))carbonyl-amino)propanoic  
20 acid)(2-(6-aminohexanoylamino)-3-((1-(3-(imidazol-2-  
ylamino)propyl)(1H-indazol-5-yl))carbonyl-amino)propanoic  
acid)];

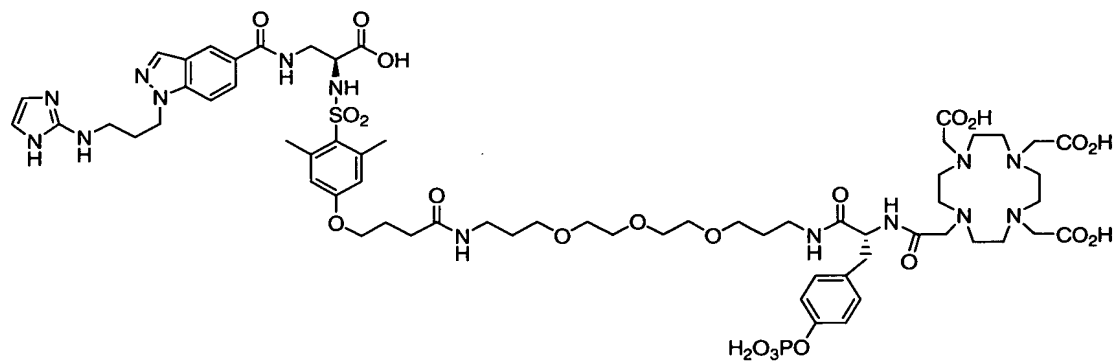
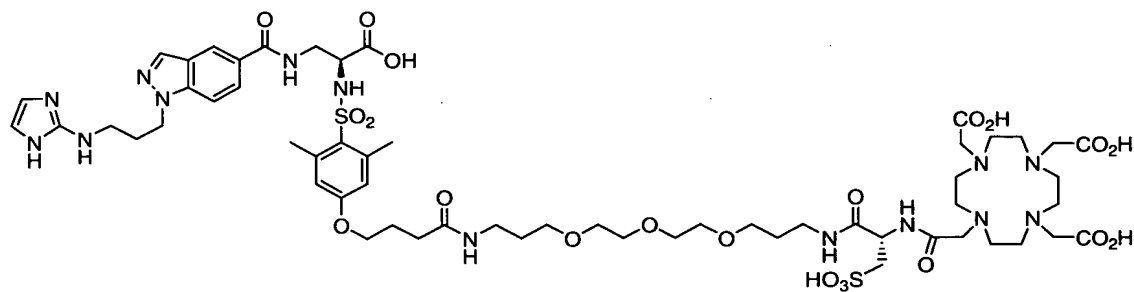
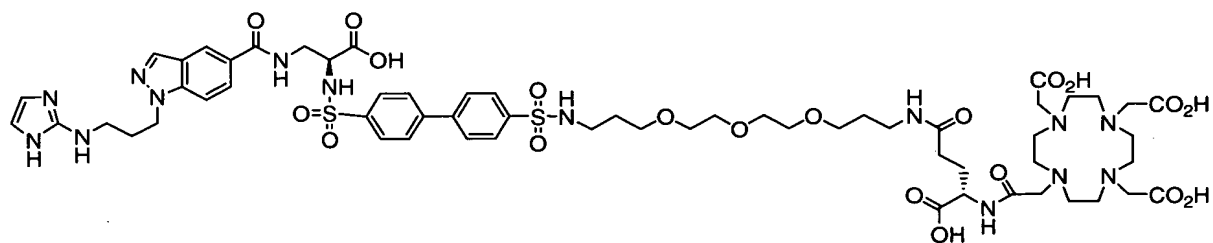
25 2-(1,4,7,10-tetraaza-4,7,10-tris(carboxymethyl)-1-  
cyclododecyl)acetyl-{2-(6-aminohexanoylamino)-3-((1-(3-  
(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonyl-  
amino)propanoic acid};

30 2-(1,4,7,10-tetraaza-4,7,10-tris(carboxymethyl)-1-  
cyclododecyl)acetyl-Glu{2-(6-Amino hexanoylamino)-3-((1-  
(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))carbonyl-  
amino)propanoic acid}{2-(6-Amino hexanoylamino)-3-((1-(3-

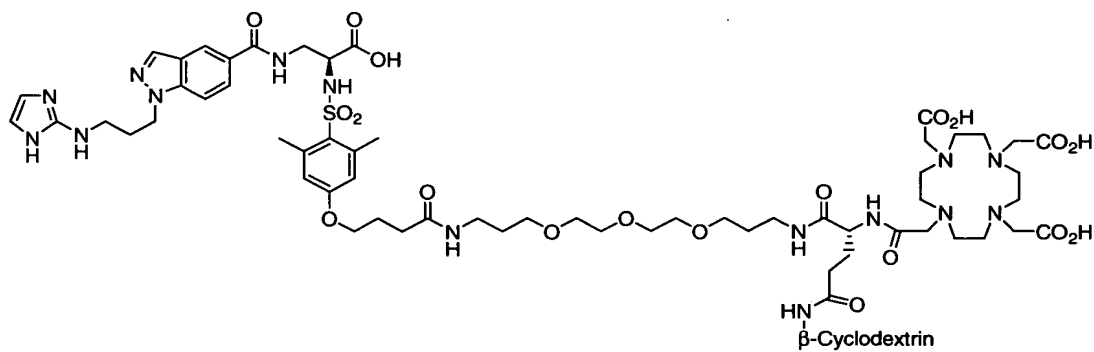
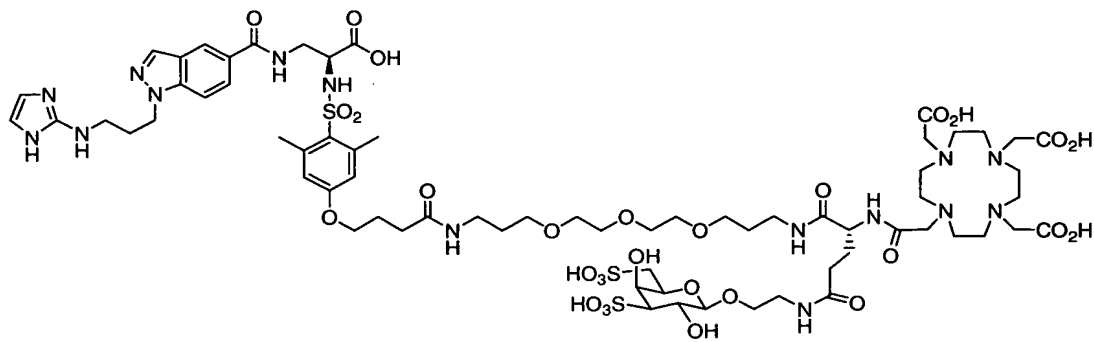
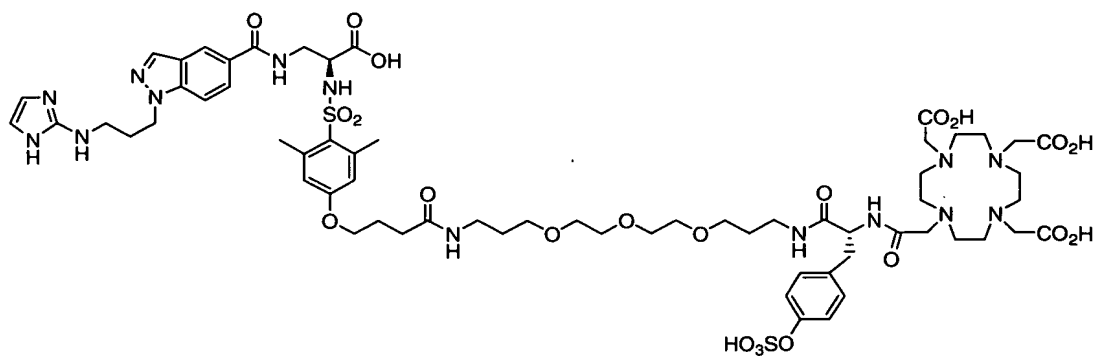
(imidazol-2-ylamino)propyl) (1H-indazol-5-yl)) carbonyl-amino)propanoic acid};



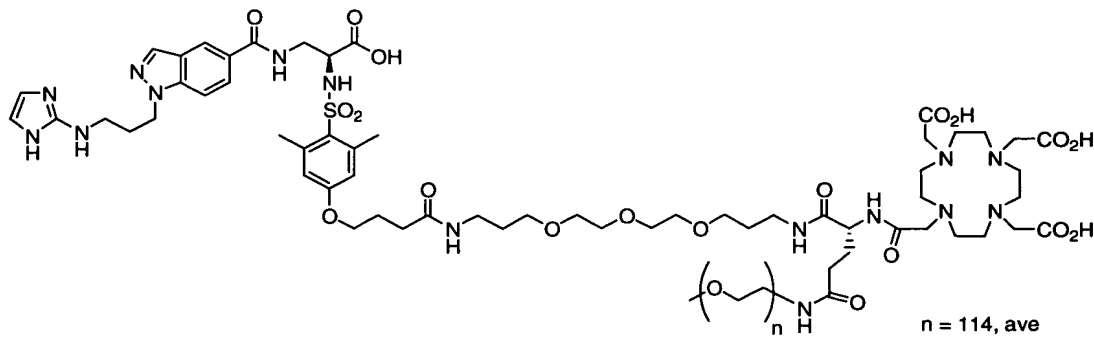
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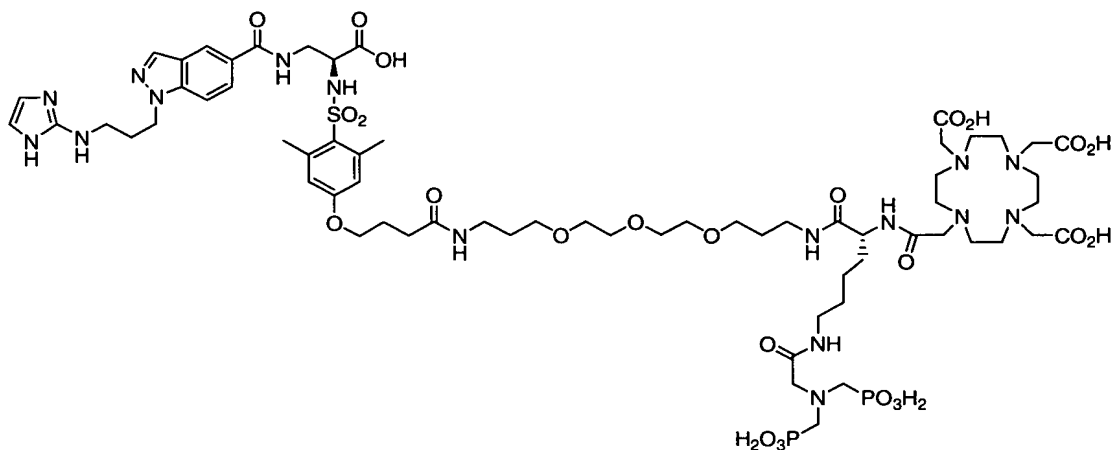
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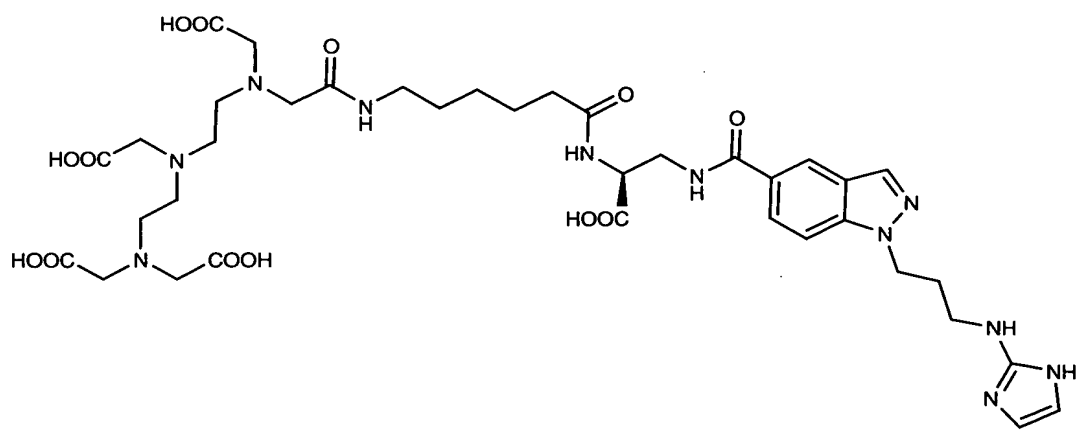
2-(((4-(3-(N-(3-(2-(2-(3-(2-(1,4,7,10-tetraaza-4,7,10-tris(carboxymethyl)cyclododecylacetyl-amino)-6-aminohexanoylamino)propoxy)ethoxy)ethoxy)propyl)-

10

carbamoyl)propoxy)-2,6-dimethylphenyl)sulfonyl)amino)-3-  
((1-(3-(imidazol-2-ylamino)propyl)(1H-indazol-5-yl))-  
carbonylamino)propionic acid salt;



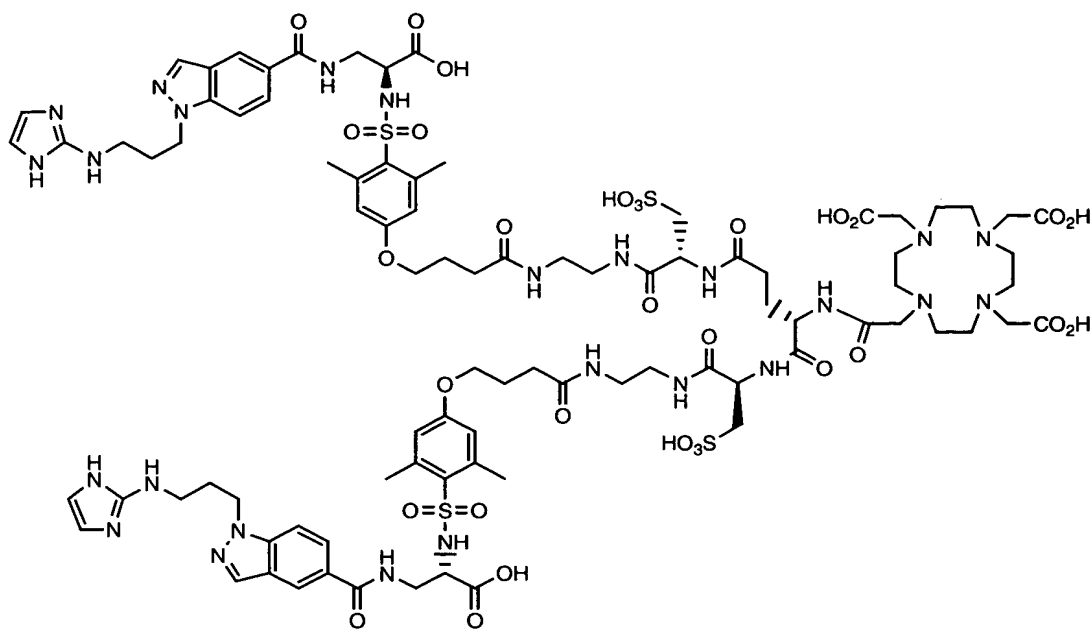
5



2-({[4-(3-{N-[2-((2R)-3-Sulfo-2-{2-[1,4,7,10-tetraaza-4,7,10-tris(carboxymethyl)cyclododecyl]acetylamino}-propyl)ethyl]carbamoyl}propoxy)-2,6-dimethylphenyl]-sulfonyl}amino)(2S)-3-({1-[3-(imidazol-2-ylamino)propyl](1H-indazol-5-yl)}carbonylamino)propanoic Acid;

15





$\beta^3$  2-[(4-[4-([2-((2R)-3-Sulfo-2-{2-[1,4,7,10-tetraaza-4,7,10-  
 5 tris(carboxymethyl)cyclododecyl]-  
 acetylamino}propyl)ethyl]amino)sulfonyl)phenyl]phenyl]-  
 sulfonyl)amino] (2S)-3-({1-[3-(imidazol-2-  
 ylamino)propyl] (1H-indazol-5-yl)}carbonylamino)propanoic  
 Acid;

10 (4S)-4-(N-{1-[N-(2-{4-[4-({[(1S)-1-carboxy-2-({1-[3-(2-  
 pyridylamino)propyl] (1H-indazol-5-  
 yl)}carbonylamino)ethyl]amino)sulfonyl)-3,5-  
 dimethylphenoxy]butanoylamino)ethyl)carbamoyl]-3-  
 15 carboxypropyl}carbamoyl)-4-{2-[1,4,7,10-tetraaza-4,7,10-  
 tris(carboxymethyl)cyclododecyl]acetylamino}butanoic  
 acid;

(4S)-4-(N-{1-[N-(2-{4-[4-({[(1S)-1-carboxy-2-({1-[3-(imidazol-  
 2-ylamino)propyl] (1H-indazol-5-  
 20 yl)}carbonylamino)ethyl]amino)sulfonyl)-3,5-  
 dimethylphenoxy]butanoylamino)ethyl)carbamoyl]-3-  
 carboxypropyl}carbamoyl)-4-{2-[1,4,7,10-tetraaza-4,7,10-

tris(carboxymethyl)cyclododecyl]acetyl amino}butanoic acid;

5 (4S)-4-{N-[ (1S)-1- (N-{1,3-bis[N-(2-{4-[4-({[(1S)-1-carboxy-2-  
({1-[3-(imidazol-2-ylamino)propyl](1H-indazol-5-  
yl)}carbonylamino)ethyl]amino)sulfonyl)-3,5-  
dimethylphenoxy]butanoylamino)ethyl) carbamoyl]propyl}carb  
amoyl)-3-carboxypropyl]carbamoyl}-4-(6-{2-[1,4,7,10-  
tetraaza-4,7,10-  
10 tris(carboxymethyl)cyclododecyl]acetyl amino}  
hexanoylamino)butanoic acid;

13<sup>3</sup> 15 (4S)-4-(N-{1-[N-(2-{4-[4-({[(1S)-1-carboxy-2-({1-[3-(3,4,5,6-  
tetrahydropyrimidin-2-ylamino)propyl](1H-indazol-5-  
yl)}carbonylamino)ethyl]amino)sulfonyl)-3,5-  
dimethylphenoxy]butanoylamino)ethyl) carbamoyl]-3-carboxy  
propyl}carbamoyl)-4-{2-[1,4,7,10-tetraaza-4,7,10-tris  
(carboxymethyl)cyclododecyl]acetyl amino}butanoic acid;

20 (4S)-4-(N-{1-[N-(2-{4-[4-({[(1S)-1-carboxy-2-({1-methyl-3-[3-  
(2-3,4,5,6-tetrahydropyridylamino)propyl] (1H-indazol-6-  
yl)}carbonylamino)ethyl]amino)sulfonyl)-3,5-  
dimethylphenoxy]butanoylamino)ethyl) carbamoyl]-3-  
carboxypropyl}carbamoyl)-4-{2-[1,4,7,10-tetraaza-4,7,10-  
25 tris(carboxymethyl)cyclododecyl]acetyl amino}butanoic  
acid;

30 (4S)-4-(N-{ (1S)-1-[N-(2-{4-[4-({[(1S)-1-carboxy-2-({1-[2-(2-  
3,4,5,6-tetrahydropyridylamino)ethyl] (1H-indazol-5-  
yl)}carbonylamino)ethyl]amino)sulfonyl)-3,5-  
dimethylphenoxy]butanoylamino)ethyl) carbamoyl]-3-carboxy  
propyl}carbamoyl)-4-{2-[1,4,7,10-tetraaza-4,7,10-tris  
(carboxymethyl)cyclododecyl]acetyl amino}butanoic acid;

(2S)-2-{{{(2,6-dimethyl-4-{3-[N-(2-{2-[1,4,7,10-tetraaza-  
4,7,10-tris(carboxymethyl)cyclododecyl]acetyl-  
amino}ethyl)carbamoyl]propoxy}phenyl)sulfonyl]amino}-3-  
(2-{2-(2-3,4,5,6-tetrahydropyridylamino)ethyl}(2-hydro-  
1H-indazol-5-yl))carbonylamino}propanoic acid;

(4S)-4-{N-[(1S)-1-(N-{2-[(4-[4-[(1S)-1-carboxy-2-[(1-[2-(2-  
3,4,5,6-tetrahydropyridylamino)ethyl](1H-indazol-5-  
yl))carbonylamino)ethyl]amino}sulfonyl]phenyl]  
phenyl)sulfonyl]amino}ethyl]carbamoyl)-3-carboxypropyl]  
carbamoyl}-4-{2-[1,4,7,10-tetraaza-4,7,10-tris(carboxy-  
methyl)cyclododecyl]acetylamino}butanoic acid;

$\beta^3$  (4S)-4-{N-[(1S)-1-(N-{2-[(4-[4-[(1S)-1-carboxy-2-[(1-[3-  
(3,4,5,6-tetrahydropyrimidin-2-ylamino)propyl](1H-  
indazol-5-yl))carbonylamino)ethyl]amino}sulfonyl]  
phenyl]phenyl)sulfonyl]amino}ethyl]carbamoyl)-3-carboxy-  
propyl]carbamoyl}-4-{2-[1,4,7,10-tetraaza-4,7,10-tris  
(carboxymethyl)cyclododecyl]acetylamino}butanoic acid;

(2S)-3-({3-[(imidazol-2-ylamino)methyl]-1-methyl(1H-indazol-  
6-yl))carbonylamino)-2-({[4-(4-{[2-{2-[1,4,7,10-  
tetraaza-4,7,10-tris(carboxymethyl)  
cyclododecyl]acetylamino}ethyl]amino}sulfonyl]phenyl]phen-  
yl)sulfonyl]amino}propanoic acid;

3-[(7-{3-[(6-{[(1E)-1-aza-2-(2-sulfophenyl)vinyl]amino}(3-  
pyridyl))carbonylamino]propoxy}-1-[3-(imidazol-2-  
ylamino)propyl](1H-indazol-5-yl))-carbonylamino](2S)-2-  
{[(2,4,6-trimethylphenyl)sulfonyl]-amino}propanoic acid;  
and

3-{[1-[3-(imidazol-2-ylamino)propyl]-7-(3-{2-[1,4,7,10-  
tetraaza-4,7,10-tris(carboxymethyl)cyclododecyl]-

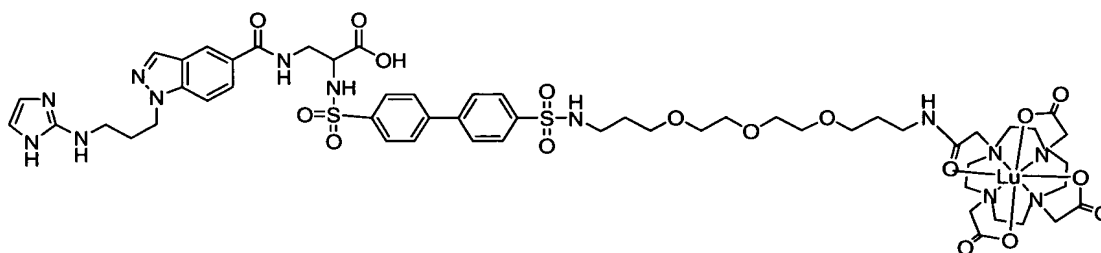
acetylamino}propoxy) (1H-indazol-5-yl)]carbonylamino}-2-  
{[(2,4,6-trimethylphenyl)sulfonyl]amino}propanoic acid;

or a pharmaceutically acceptable salt form thereof.

5

100. (New) A method according to claim 95, wherein the  
therapeutic metal is  $^{177}\text{Lu}$  or  $^{153}\text{Sm}$ .

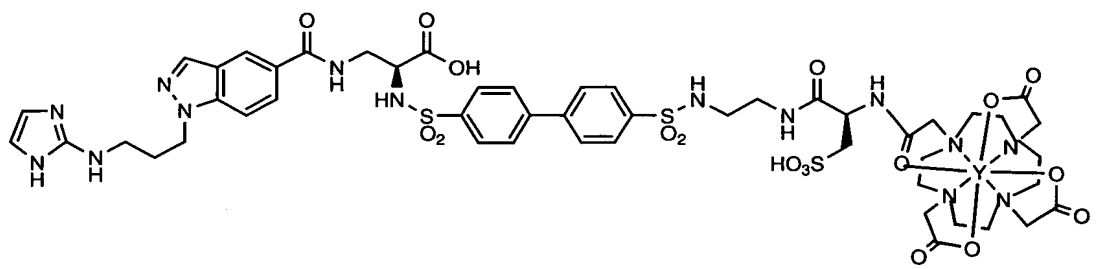
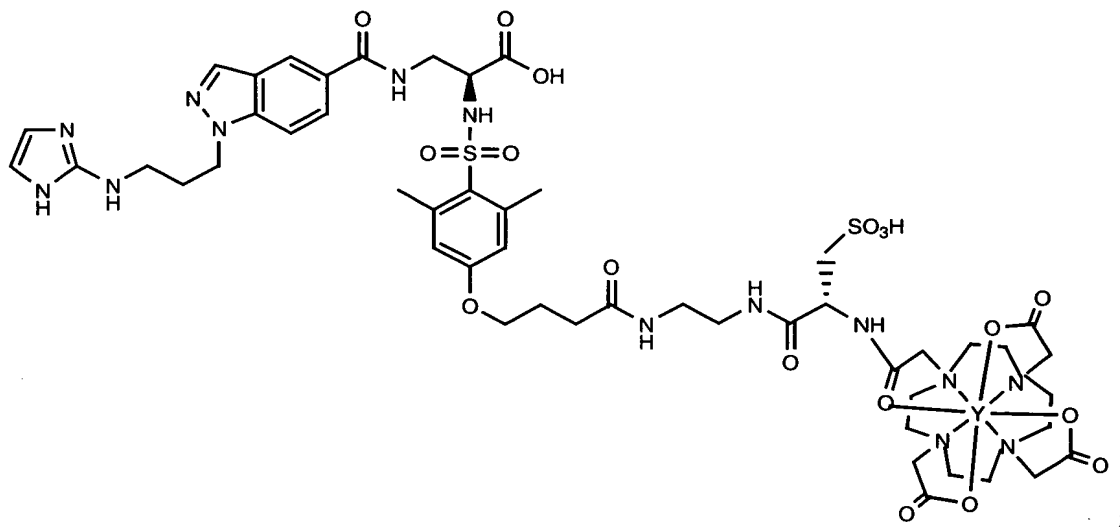
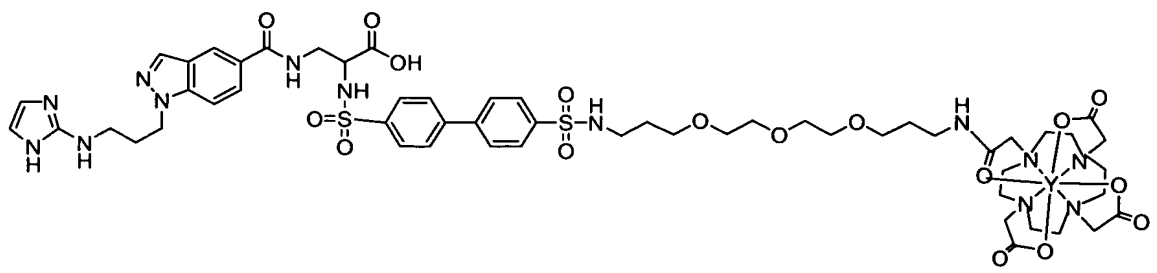
101. (New) A method according to claim 68, wherein the  
10 radiopharmaceutical is



102. (New) A method according to claim 95, wherein the  
therapeutic metal is  $^{90}\text{Y}$ .

15

103. (New) A method according to claim 68, wherein the  
radiopharmaceutical is selected from the group:



and

